SANYO

FILE NO.

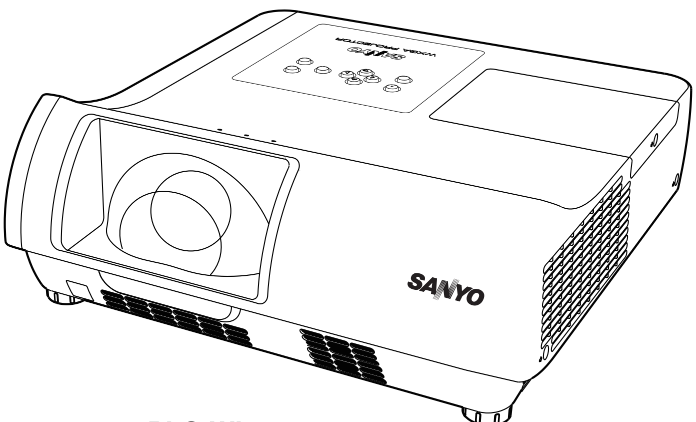
SERVICE MANUAL

Multimedia Projector

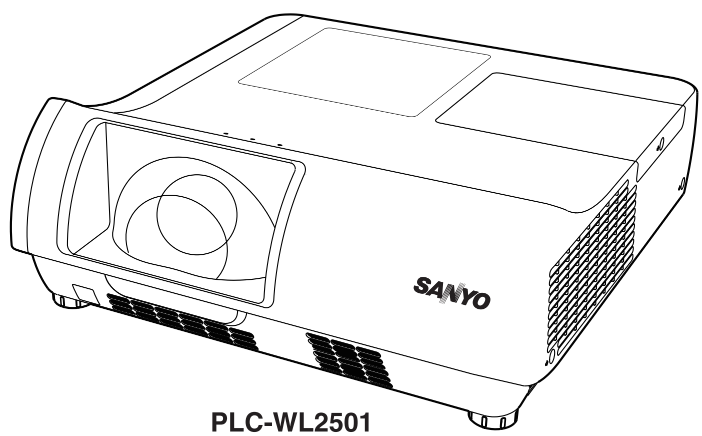
Model No. PLC-WL2500
PLC-WL2501

U.S.A, Canada,
Europe, U.K, Asia

Original Version



PLC-WL2500



PLC-WL2501

* Model PLC-WL2501 has no control keys on the cabinet top. The illustrations in this manual are used for the model PLC-WL2500.

Chassis No. KJ8-WL250000
KJ8-WL250100

Match the Chassis No. on the rating label on the projector with the Chassis No. in the Service Manual.
If the Original Version Service Manual Chassis No. does not match the projector's, additional Service Literature is required. You must refer to "Notices" to the Original Service Manual prior to servicing.

PRODUCT CODE

PLC-WL2500	PLC-WL2501	
1 122 509 20	1 122 509 00	U.S.A. Canada
1 122 510 20	1 122 510 00	Asia, Africa
1 122 510 22	1 122 510 02	H.K.
1 122 510 23	1 122 510 03	Europe, U.K.

REFERENCE NO. SM5111262-00

Contents

Safety Instructions

Safety Precautions

WARNING:
The chassis of this projector is isolated (COLD) from AC line by using the converter transformer. Primary side of the converter and lamp power supply unit circuit is connected to the AC line and it is hot, which hot circuit is identified with the line (⏚⏚⏚) in the schematic diagram. For continued product safety and protection of personnel injury, servicing should be made with qualified personnel.

The following precautions must be observed.

1: An isolation transformer should be connected in the power line between the projector and the AC line before any service is performed on the projector.

2: Comply with all caution and safety-related notes provided on the cabinet back, cabinet bottom, inside the cabinet or on the chassis.

3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, etc.

DO NOT OPERATE THIS PROJECTOR WITHOUT THE PROTECTIVE SHIELD IN POSITION AND PR OPERLY SECURED.

4: Before replacing the cabinet cover, thoroughly inspect the inside of the cabinet to see that no stray parts or tools have been left inside.

Before returning any projector to the customer, the service personnel must be sure it is completely safe to operate without danger of electric shock.

Product Safety Notice

Product safety should be considered when a component replacement is made in any area of the projector. Components indicated by mark ! in the parts list and the schematic diagram designate components in which safety can be of special significance. It is, therefore, particularly recommended that the replacement of there parts must be made by exactly the same parts.

Service Personnel Warning

Eye damage may result from directly viewing the light produced by the Lamp used in this equipment. Always turn off Lamp before opening cover. The Ultraviolet radiation eye protection required during this servicing.
Never turn the power on without the lamp to avoid electric-shock or damage of the devices since the stabilizer generates high voltages (15kV - 25kV) at its starts.
Since the lamp is very high temperature during units operation replacement of the lamp should be done at least 45 minutes after the power has been turned off, to allow the lamp cool-off.

Specifications

Mechanical Information

Projector Type	Multi-media Projector
Dimensions (W x H x D)	13.78 x 5.10" x 15.03" (350.0mm x 129.4mm x 381.9mm) (Not including protrusions)
Net Weight	10.1 lbs (4.6kg)
Feet Adjustment	0˚ to 10˚

Panel Resolution

LCD Panel System	0.59" TFT Active Matrix type, 3 panels
Panel Resolution	1,280 x 800 dots
Number of Pixels	3,072,000 (1,280 x 800 x 3 panels)

Signal Compatibility

Color System	PAL, SECAM, NTSC, NTSC4.43, PAL-M, and PAL-N
SD/HDTV Signal	480i, 480p, 575i, 575p, 720p, 1035i, and 1080i
Input Scanning Frequency	H-sync. 15 kHz-100 kHz, V-sync. 50-100 Hz

Optical Information

Projection Image Size (Diagonal)	Adjustable from 60” to 110”
Throw Distance	2.09’ - 3.93' (0.64 m - 119.7 cm)
Projection Lens	F 1.8 lens with f 6.68 mm with manual focus
Projection Lamp	230W

Interface

Video Input Jack	RCA Type x 1
S-Video Input Jack	Mini DIN 4 pin x 1
Audio Input Jacks	RCA Type x 2
Computer Input 1 / Component Input Terminal	Analog RGB (Mini D-sub 15 pin) Terminal x 1
Computer Input 2 / Monitor Output Terminal	Analog RGB (Mini D-sub 15 pin) Terminal x 1 (In/Out switchable)
Computer/ Component Audio Input Jack	Mini Jack (stereo) x 1
Control port	D-sub 9 pin x 1
Audio Output Jack	Mini Jack (stereo) x 1 (Variable)
LAN Connection Terminal	RJ45
HDMI	x 1

Audio

Internal Audio Amp	10.0 W RMS
Built-in Speaker	1 speaker, 1.46" (37mm)

Power

Voltage and Power Consumption	AC 100–120 V (3.9 A Max. Ampere), 50/60 Hz (The U.S.A and Canada) AC 100-240 V (3.9 - 2.2 A Max. Ampere), 50/60Hz (For other countries)

Operating Environment

Operating Temperature	41˚F–95˚F (5 ˚C–35 ˚C)
Storage Temperature	14˚F–140˚F (-10˚C–60 ˚C)

Remote Control

Battery	AAA or LR03 1.5V ALKALINE TYPE x 2
Operating Range	16.4' (5 m)/±30˚
Dimensions	2.0" (W) x 0.7" (H) x 4.3" (D) (52 mm x 18 mm x 110 mm)
Net Weight	2.37 oz (67 g) (including batteries)

Accessories

Owner’s Manual (CD-ROM), Quick Reference Guide, AC Power Cord, Remote Control and Batteries
VGA Cable, PIN Code Label, Lens Cover, Safety Manual

- The specifications are subject to change without notice.
- LCD panels are manufactured to the highest possible standards. Even though 99.99% of the pixels are effective, a tiny fraction of the pixels (0.01% or less) may be ineffective by the characteristics of the LCD panels.

c UL US LISTED

This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.

Circuit Protections

This projector provides the following circuit protections to operate in safety. If the abnormality occurs inside the projector, it will automatically turn off by operating one of the following protection circuits.

Thermal switch

There is the thermal switch (SW902) inside of the projector to detect the internal temperature rising abnormally. When the internal temperature reaches near 85˚C, the thermal switch opens to cut off the power to the power circuit.

The thermal switch can be reset itself automatically when the internal temperature becomes normal.

When the internal temperature reaches near 55˚C, the thermal switch returns automatically.

Lamp cover switch

The lamp cover switch (SW901) cuts off the drive signal to the lamp circuit when the lamp cover is removed or not closed completely. After opening the lamp cover for replacing the lamp ass'y, place the lamp cover correctly otherwise the projector can not turn on.

Fuse

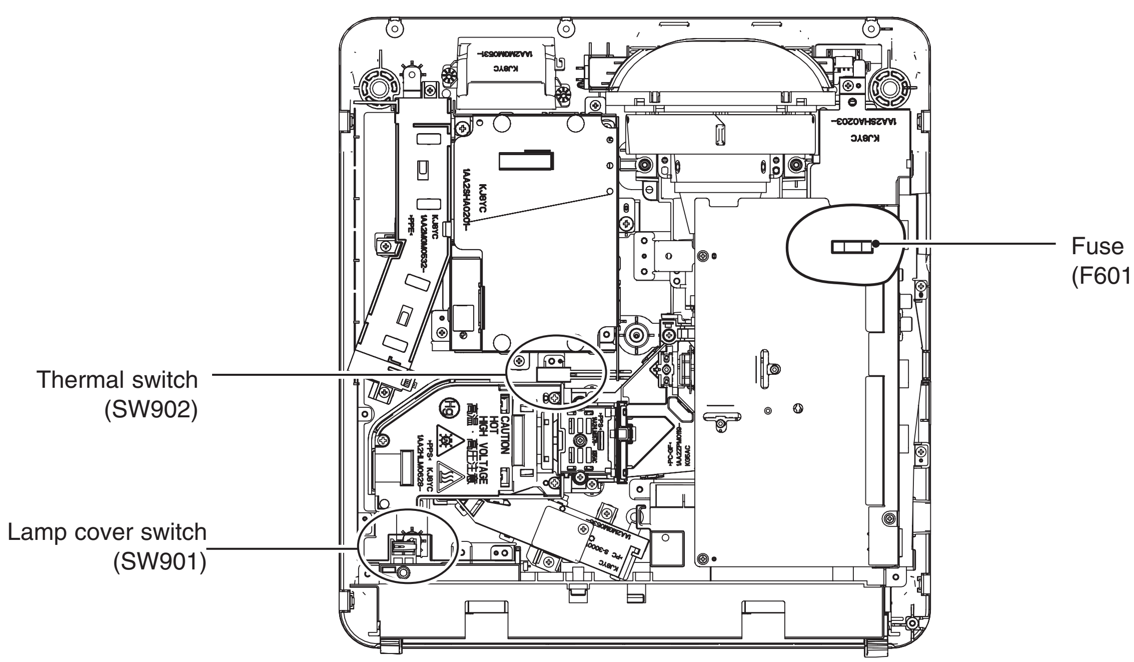
A fuse is located inside of the projector. When the POWER indicator is not lighting, the fuse may be opened. Check the fuse as following steps.
The fuse should be used with the type listed right;

Fuse Part No.: 323 021 7804
TYPE T6.3AH 250V FUSE
LITTLE FUSE INC. TYPE 21506.3

Fuse Part No, : 423 034 4101
TYPE T6.3AH 250V FUSE
Hollyland Co, Ltd. TYPE 50CT063H

How to replace the fuse

1. The fuse is placed on the filter board behind the main board. Remove the cabinet top, AV panel and main board.
2. Take the fuse off, and replace the new one with the specified type.



Warning temperature and power failure protection

The projector will be automatically turned off when the internal temperature of the projector is abnormally high, or the cooling fans stop spinning, or the power supplies in the projector are failed.

- If both of the POWER and WARNING indicators are flashing, it may detect the abnormal temperature inside the projector. Check the following possible causes and wait until the POWER indicator stops flashing, and then try to turn on the projector.
- If the WARNING indicator lights red, it may defect the cooling fans or power supply circuits. Check fans operation and power supply lines referring to the chapter “Power supply & protection circuit” in the Chassis Block Diagram section.

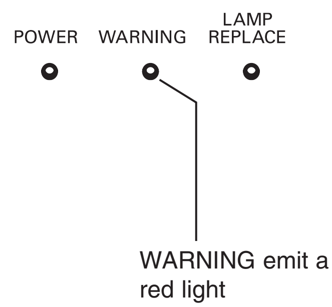
Possible causes

- Air filters are clogged with dust particles. Remove dust from the air filters by following instructions in the “Air filter care and cleaning” below.
- Ventilation slots of the projector are blocked. In such an event, reposition the projector so that ventilation slots are not obstructed.
- Check if projector is used at higher temperature place (Normal operating temperature is 5 to 35 ˚C or 41 to 95˚F)

The projector is shut down and the WARNING indicator lights red.

When the projector detects an abnormal condition, it is automatically shut down to protect the inside of the projector and the WARNING indicator lights red. In this case, unplug the AC power cord and reconnect it, and then turn the projector on once again to verify operation. If the projector cannot be turned on and the WARNING indicator still lights red, unplug the AC power cord and contact the service station.

Indicators



CAUTION
DO NOT LEAVE THE PROJECTOR WITH THE AC POWER CORD CONNECTED UNDER AN ABNORMAL CONDITION. IT MAY RESULT IN FIRE OR ELECTRIC SHOCK.

Maintenance

Replacing the Filters

Filter prevents dust from accumulating on the optical elements inside the projector. Should the filter become clogged with dust particles, it will reduce cooling fans' effectiveness and may result in internal heat buildup and adversely affect the life of the projector. If a "Filter warning" icon appears on the screen, replace the filter cartridge immediately by following the steps below.

1 Turn off the projector, and unplug the AC power cord from the AC outlet.

2 First, clean up the dust on the projector and around the air vents.

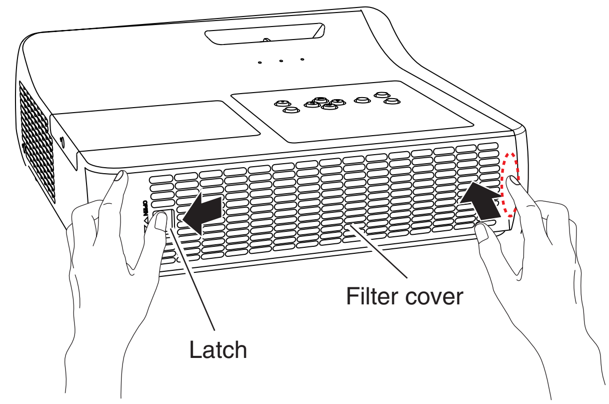
3 Press and hold any part of the red circle, and press ◀ leftwards on the filter cover to release the latch and open the filter cover.

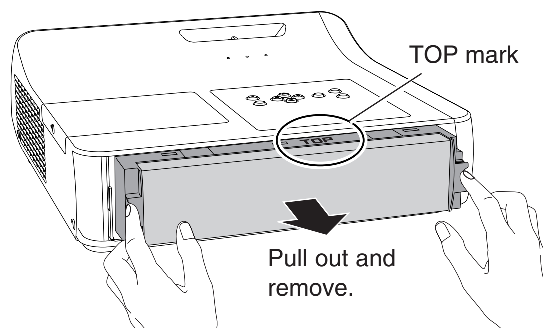
4 Pull out the filter cartridge. When taking out the filter cartridge, put your fingers on the filter tab and then pull.

5 Put the new one back into the position and close the filter cover. Ensure that the area with "TOP" mark is in an upward direction.

6 Connect the AC power cord to the projector and turn on the projector.

7 Reset the filter counter.

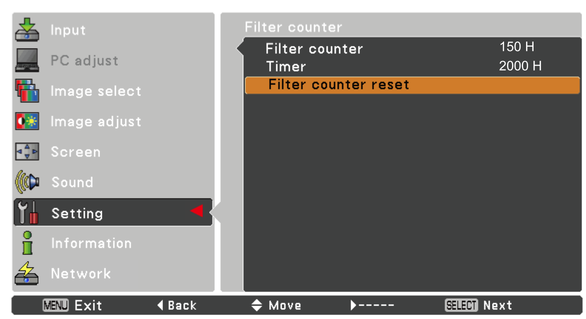




⚠ **CAUTION**
Do not operate the projector with the filters removed. Dust may accumulate on the optical elements degrading picture quality.
Do not put anything into the air vents. Doing so may result in malfunction of the projector.

RECOMMENDATION
We recommend avoiding dusty/smoky environments when you operate the projector. Usage in these environments may cause poor image quality.
When using the projector under dusty or smoky conditions, dust may accumulate on a lens, LCD panels, or optical elements inside the projector degrading the quality of a projected image. When the symptoms above are noticed, contact your authorized dealer or service station for proper cleaning.

Filter counter



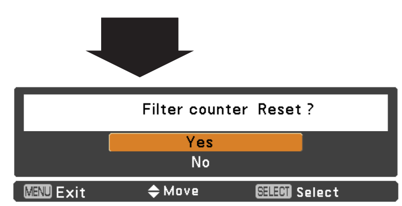
Resetting the Filter Counter

Be sure to reset the Filter counter after replacing the filters.

1 Press the **MENU** button to display the On-Screen Menu. Use the Point ▲▼ buttons to select **Setting** and then press the Point ▶ or **SELECT** button.

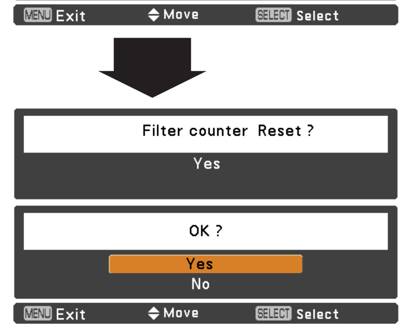
2 Use the Point ▲▼ buttons to select **Filter counter** and then press the Point ▶ or the **SELECT** button. Use the Point ▲▼ buttons to select **Filter counter reset** and then press the **SELECT** button. **Filter counter Reset?** appears. Select **Yes** to continue.

3 Another confirmation dialog box appears, select **Yes** to reset the Filter counter.



Filter counter Reset? appears.

Select **Yes**, then another confirmation box appears.

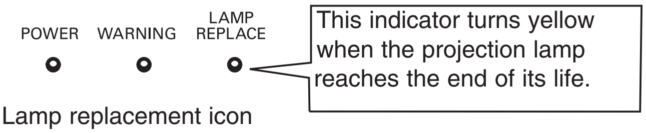


Select **Yes** again to reset the Filter counter.

Lamp Replacement

When the projection lamp of the projector reaches its end of life, the Lamp replacement icon appears on the screen and LAMP REPLACE indicator lights yellow. Replace the lamp with a new one promptly. The timing when the LAMP REPLACE indicator should light is depending on the lamp mode.

Top Panel



Lamp replacement icon



Note:
The Lamp replacement icon will not appear when the Display function is set to Off, during Freeze, or No show.

WARNING:
TURN OFF THE UV LAMP BEFORE OPENING THE LAMP COVER

CAUTION

When replacing the lamp because it has stopped illuminating, there is a possibility that the lamp may be broken. If replacing the lamp of a projector which has been installed on the ceiling, you should always assume that the lamp is broken, and you should stand to the side of the lamp cover, not underneath it. Remove the lamp cover gently. Small pieces of glass may fall out when the lamp cover is opened. If pieces of glass get into your eyes or mouth, seek medical advice immediately.

CAUTION

Allow a projector to cool for at least 45 minutes before you open the Lamp Cover. The inside of the projector can become very hot.

CAUTION

For continued safety, replace with a lamp of the same type. Do not drop a lamp or touch a glass bulb! The glass can shatter and may cause injury.

Follow these steps to replace the lamp.

1. Turn off the projector and unplug the AC power cord. Let the projector cool for at least 45 minutes.
2. Loosen the screw and open the lamp cover.
3. Loosen the three (3) screws that secure the lamp. Lift the lamp out of the projector by using the handle.
4. Replace the lamp with a new one and secure the three (3) screws. Make sure that the lamp is set properly. Close the lamp cover and secure the screw.
5. Connect the AC power cord to the projector and turn on the projector.
6. Reset the lamp counter.
See "Resetting the Lamp Counter" on the next page.

ORDER REPLACEMENT LAMP
Replacement lamp can be ordered through your dealer. When ordering a projection lamp, give the following information to the dealer.

Replacement Lamp Type No. : POA-LMP141
Service Parts No. : 610 349 0847

Resetting the Lamp Counter

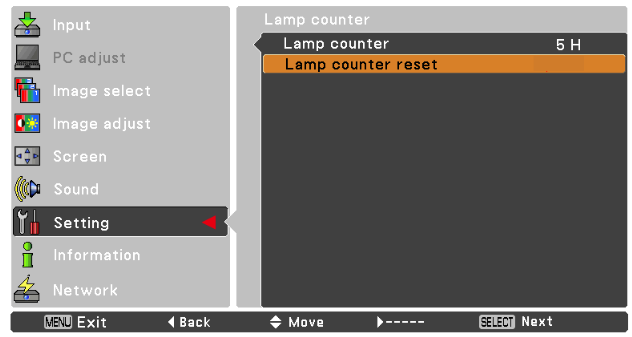
Be sure to reset the Lamp counter after the lamp is replaced. When the Lamp counter is reset, the LAMP REPLACE indicator stops lighting and the Lamp replacement icon disappears.

1 Press the MENU button to display the On-Screen Menu. Use the Point ▲▼ buttons to select **Setting** and then press the Point ▶ or the **SELECT** button.

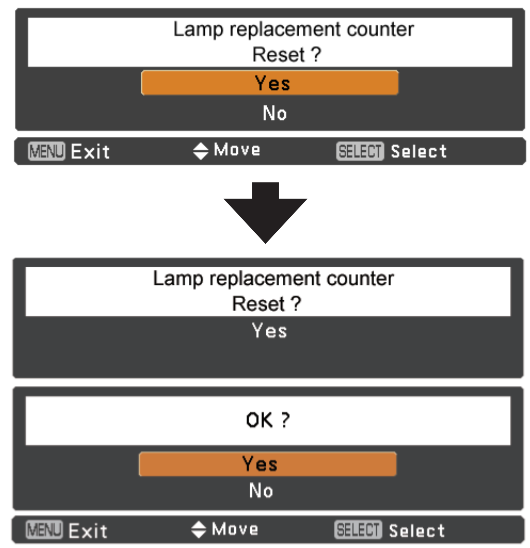
2 Use the Point ▲▼ buttons to select **Lamp counter** and then press the **SELECT** button. Use the Point ▲▼ buttons to select **Lamp counter reset** and then press **SELECT** button. **Lamp replacement counter Reset?** appears. Select **Yes** to continue.

3 Another confirmation dialog box appears, select **Yes** to reset the Lamp counter.

Lamp counter reset



Note:
Do not reset the Lamp counter without implementing lamp replacement. Be sure to reset the Lamp counter only after replacing the lamp.



Lamp replacement counter Reset? appears.

Select Yes, then another confirmation box appears.

Select Yes again to reset the Lamp counter.

How to check Lamp Used Time

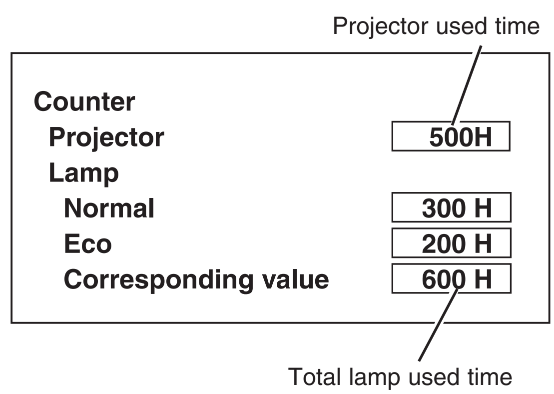
The LAMP REPLACE indicator will light yellow when the total lamp used time (Corresponding value) reaches 4,000 hours. This is to indicate that lamp replacement is required.
The total lamp used time is calculated by using the below expression,
Total lamp used time (Corresponding value)

$$= T_{eco} + T_{normal} \times 1.33$$

T_{normal} : used time in the normal mode
T_{eco} : used time in the eco mode

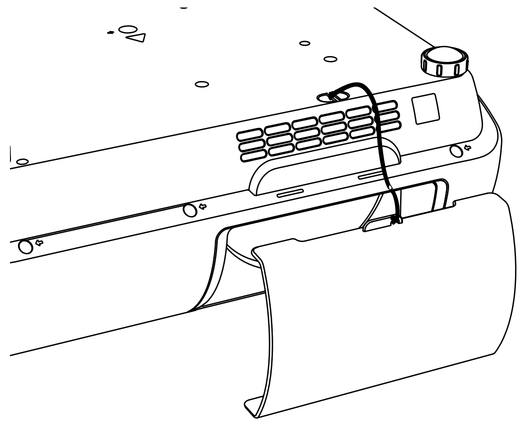
You can check the lamp used time following to the below procedure.

1 Press and hold the **ON/STAND-BY** button on the remote control for more than 20 seconds.
2 The projector used time and lamp used time will be displayed on the screen briefly as follows.



Attaching the Lens Cover

When moving the projector or while it is not in use, replace the lens cover.

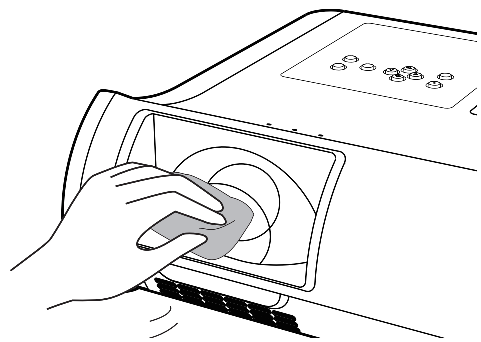


1 Thread the string through the hole on the lens cover and then tie a knot in the string to secure it in place.

2 To pass the other end of the string into the hole on the top of the projector and pull at it.

Cleaning the Projector

Cleaning the Projection Lens

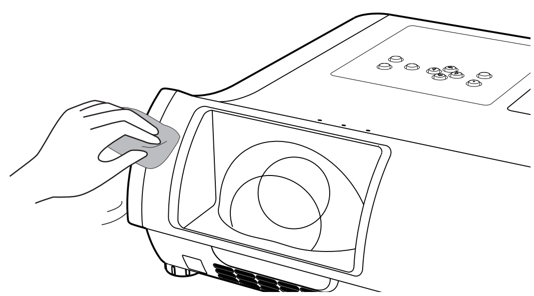


Unplug the AC power cord before cleaning.

Gently wipe the projection lens with a cleaning cloth that contains a small amount of non-abrasive camera lens cleaner, or use a lens cleaning paper or commercially available air blower to clean the lens.

Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents, or other harsh chemicals might scratch the surface of the lens.

Cleaning the Projector Cabinet



Unplug the AC power cord before cleaning.

Gently wipe the projector body with a soft dry cleaning cloth. When the cabinet is heavily soiled, use a small amount of mild detergent and finish with a soft dry cleaning cloth. Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents, or other harsh chemicals might scratch the surface of the cabinet.

When the projector is not in use, put the projector in an appropriate carrying case to protect it from dust and scratches.

CAUTION
Do not use any flammable solvents or air sprays on the projector and in its vicinity. The explosion or fire hazard may occur even after the AC power cord is unplugged because the temperature inside the projector is extremely high due to the lamps. In addition, there is a risk that the internal parts may be damaged not only by the flammable air spray but also by the cold air.

Security Function Notice

This projector provides security functions such as "Key lock", "PIN code lock" and "Logo PIN code lock". When the projector has set these security function on, you are required to enter correct PIN code to use the projector. If you do not know the correct PIN code to the projector, the projector can no longer be operated or started. In this case, you must reset those function first according to the resetting procedure described below and then check up on the projector.

Function	Description
Key lock (Only for model PLC-WL2500)	Locks operation of the side control or the remote control. If the Key lock is enabled with side control lock, the projector can no longer be started. *Initial setting: Key lock function is disabled*
PIN code lock	Prevents the projector from being operated by an unauthorized person. *Initial code: "1234"*
Logo PIN code lock	Prevents an unauthorized person for changing the start-up logo on the screen. *Initial code: "4321"*

Resetting procedure for model PLC-WL2501

1 Turn the projector on (The PIN code entry window appears).
2 Press and hold the ◀ and ▶ **button** on the remote control at the same time for more than 10 seconds. The PIN code and Logo PIN code will be reset to the factory initial code. (There is no response for the resetting.)
3 Enter the initial PIN code for the PIN code lock.

Please refer to the owner's manual for further information of the security functions.

Resetting procedure for model PLC-WL2500

1 Disconnect the AC power cord from the AC outlet.
2 As pressing the **SELECT** button, connect the AC power cord into an AC outlet again.
3 Keep pressing the **SELECT** button and then press the **ON/STAND-BY** button.
4 Release the **ON/STAND-BY** button first and then release the **SELECT** button.
- The PIN code lock and Logo PIN code lock will be reset as the initial PIN code at the factory and the Key lock function is disabled.

Please refer to the owner's manual for further information of the security functions.

Standby Mode Notice

This projector provides 2 types of standby mode, Eco standby and Network standby. According to the standby mode "Eco" or "Network", several functions are restricted as shown in the table below. To change the standby mode, use the projector's menu "Setting".

Network .... Supply the power to the network function even after turning off the projector. You can turn on /off the projector via network, modify network environment, and receive an e-mail about projector status while the projector is powered off.

Eco .... Select "Eco" when you do not use the projector via network. The projector's network function will stop when turning off the projector.

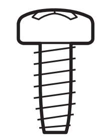
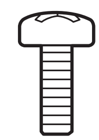
When "Eco" is selected, several functions will be restricted.

Function in the standby mode

Function	Eco	Network
Serial command control	--	✔
Network Function	--	✔
Monitor Out	--	✔
Audio Out	--	--
Direct On	--	✔

Mechanical Disassembly

Mechanical disassembly should be made following procedures in numerical order.
Following steps show the basic procedures, therefore unnecessary step may be ignored.
Caution:
The parts and screws should be placed exactly the same position as the original otherwise it may cause loss of performance and product safety.

Screws Expression (Type Diameter x Length) mm	
T type	M Type
	

1 Filter Cartridge removal

1. Press and hold the part indicated with the arrow, and press ◀ leftwards on the filter cover to release the latch and open the filter cover.
2. Pull out the Filter Cartridge.

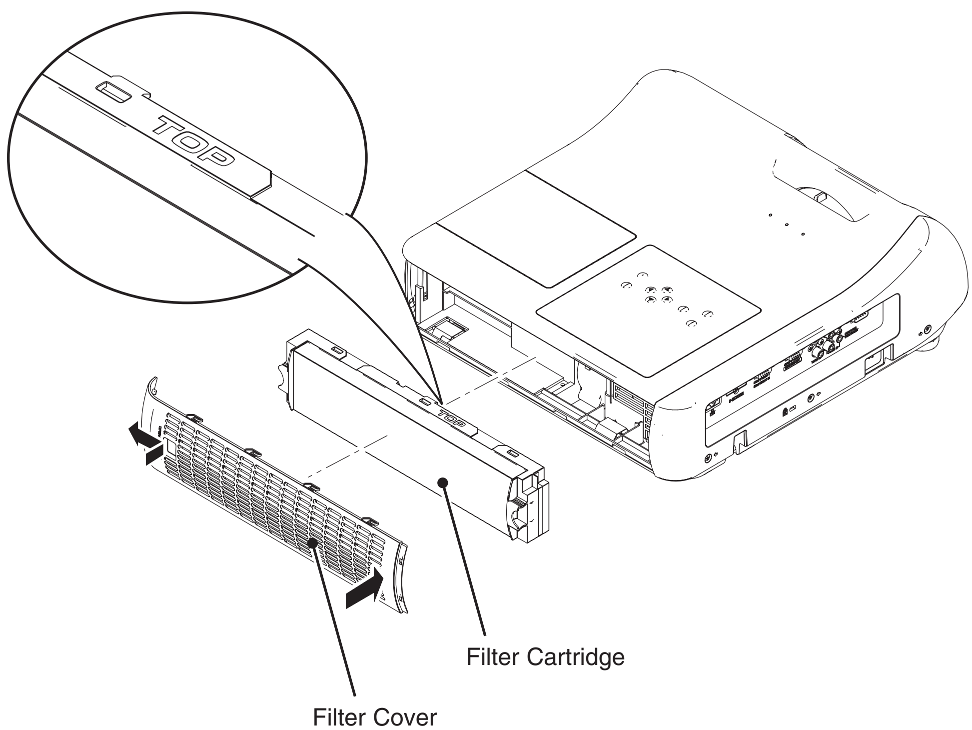


Fig.1

Note:
Do not disassemble the filter cartridge to clean up or replace the parts inside of the filter cartridge. When replacing the filter cartridge, replace whole the filter cartridge with new one to maintain the projector's performance.

2 AV Panel and Cabinet Top removal

1. Remove 5 screws A(M3x8) to remove the AV Panel.
2. Remove 3 screws B(T3x8), 1 screw C(T3x8), 2 screws D(M3x8) and 1 screw E(T3x8) and 1 screw F(T3x8) to remove the Cabinet Top assy.
3. Loosen 1 screw G and remove the Lamp Cover in the arrow direction.
4. Remove 2 screws H(T3x8) to remove the Shield Plate.

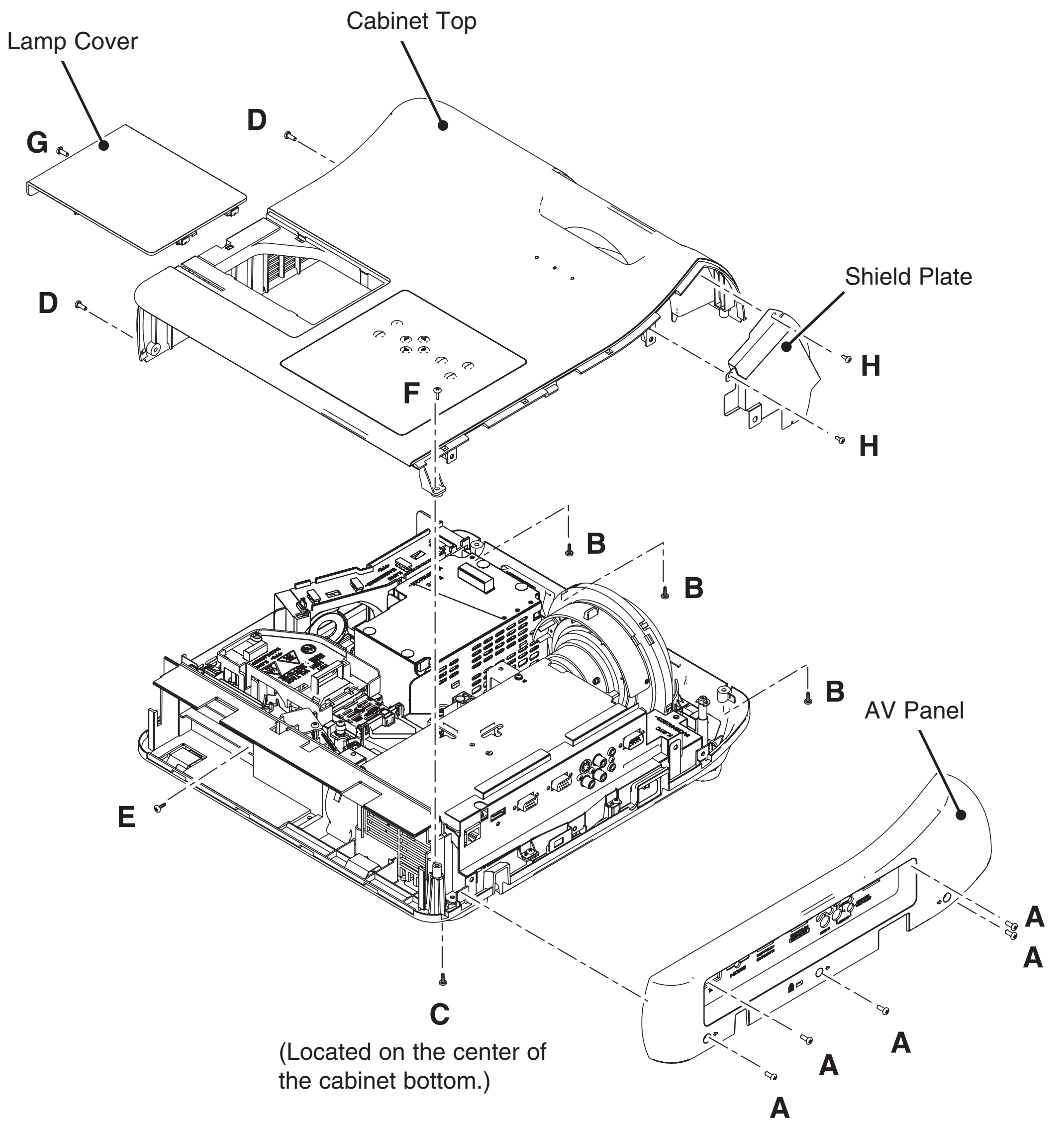


Fig.2

3 Main, Filter Boards and Lamp removal

1. Remove 2 screws A(M4x6), 2 screws B(T3x8), 2 screws C(M2.5x8) and remove the Main Board upward.
2. Remove 2 screws D(M4x6) and 2 screws E(T3x8) and remove the Filter Shield top.
3. Remove 1 screw F(M3x6) and 2 screws G(T3x8) and remove the Filter Board upward off.
4. Loosen 3 screws H and pull the Lamp upward off.

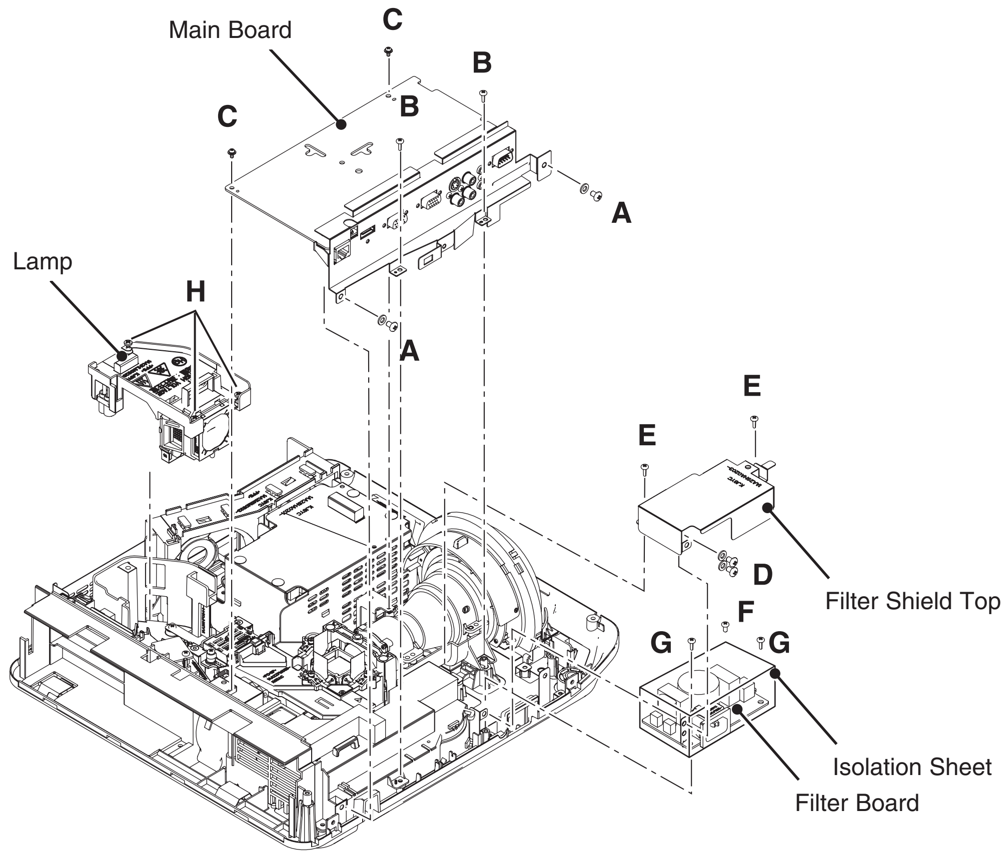


Fig.3

4 Power, Ballast Boards and Fans (FN906, FN907) removal

1. Remove 3 screws A(T3x8) to remove the Fans (FN906, FN907) Assy.
2. Remove 1 screw B(T3x8) to remove the Lamp Socket. Remove 3 screws C(T3x8) to remove the Lamp Cover Bottom. Unhook the ballast cable from the cabinet bottom.
3. Remove 2 screws D(M4x6) and 3 screws E(T3x8). Disconnect the connectors "CN1" on the Ballast Board and "K6C" on the Power Board. Remove the Power Box Top upward off.
4. Remove 3 screws F(T3x8) to remove the Power Board.

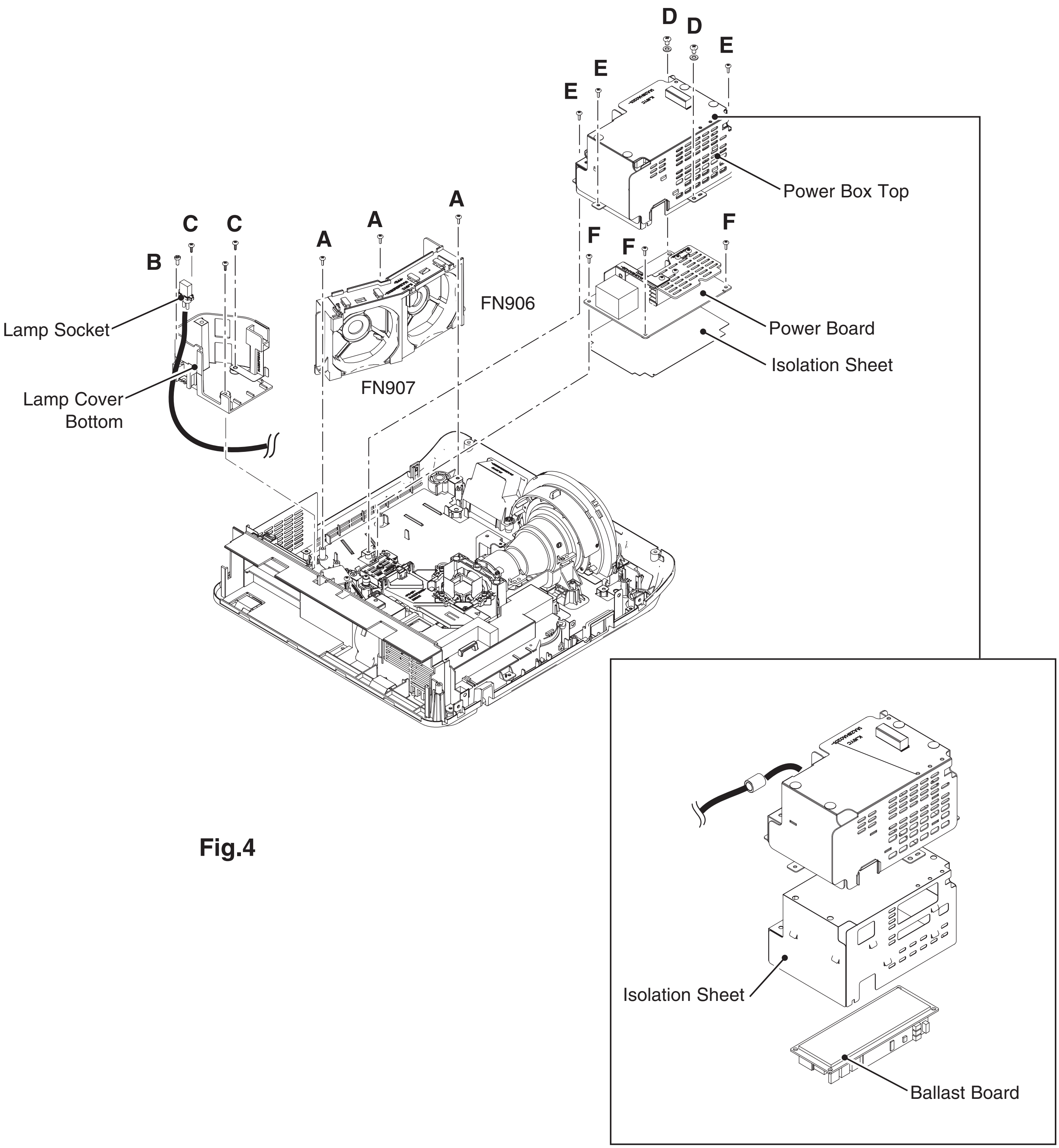


Fig.4

5 Optical Unit and Duct Assembly removal

1. Remove 2 screws A(T3x8) to remove the Main Board Holder.
2. Remove 2 screws B(T3x12) and 5 screws C(T3x8) and remove the Optical Unit upward off.
3. Remove 9 screws E(T3x8) and remove the Duct Assembly upward off.

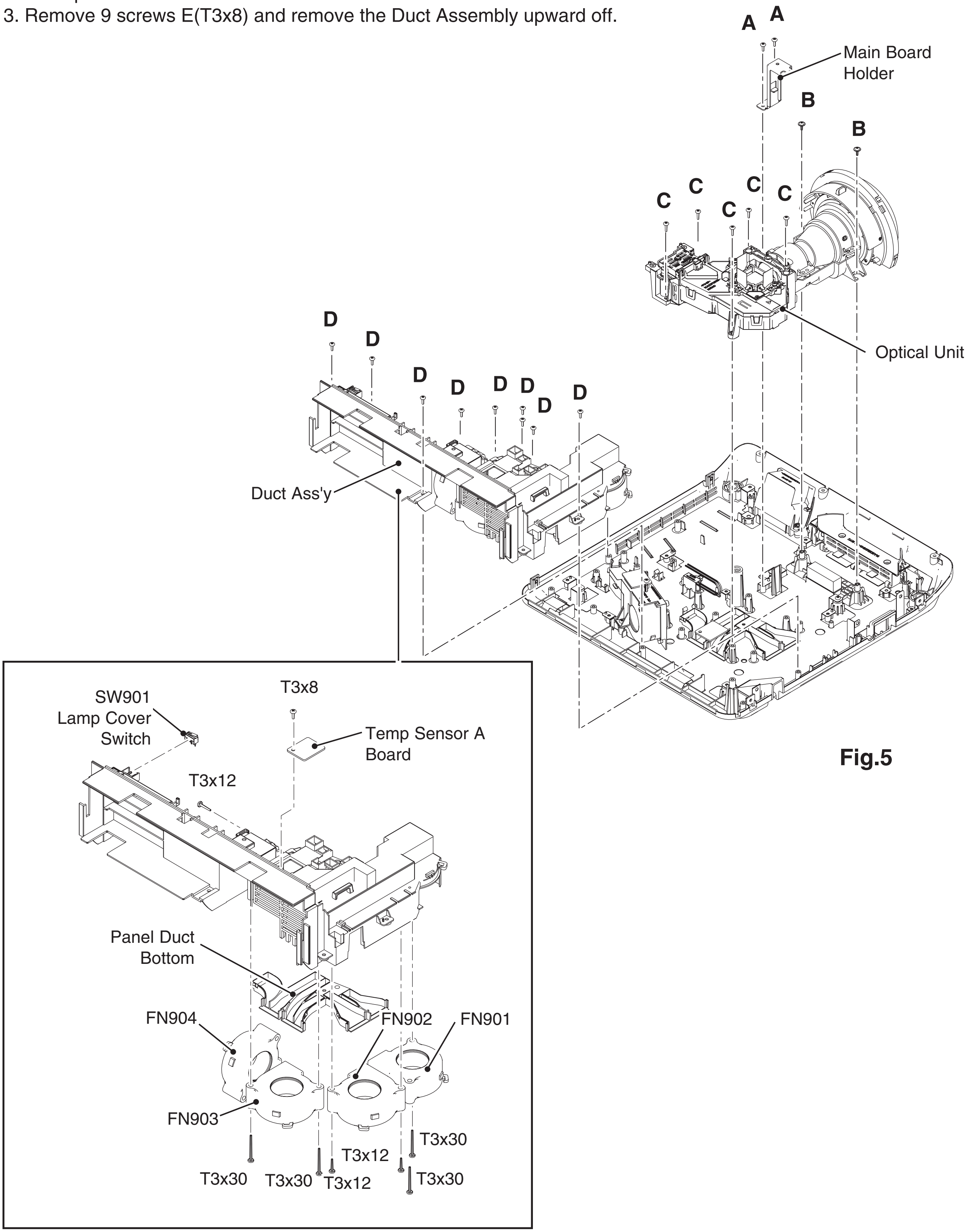
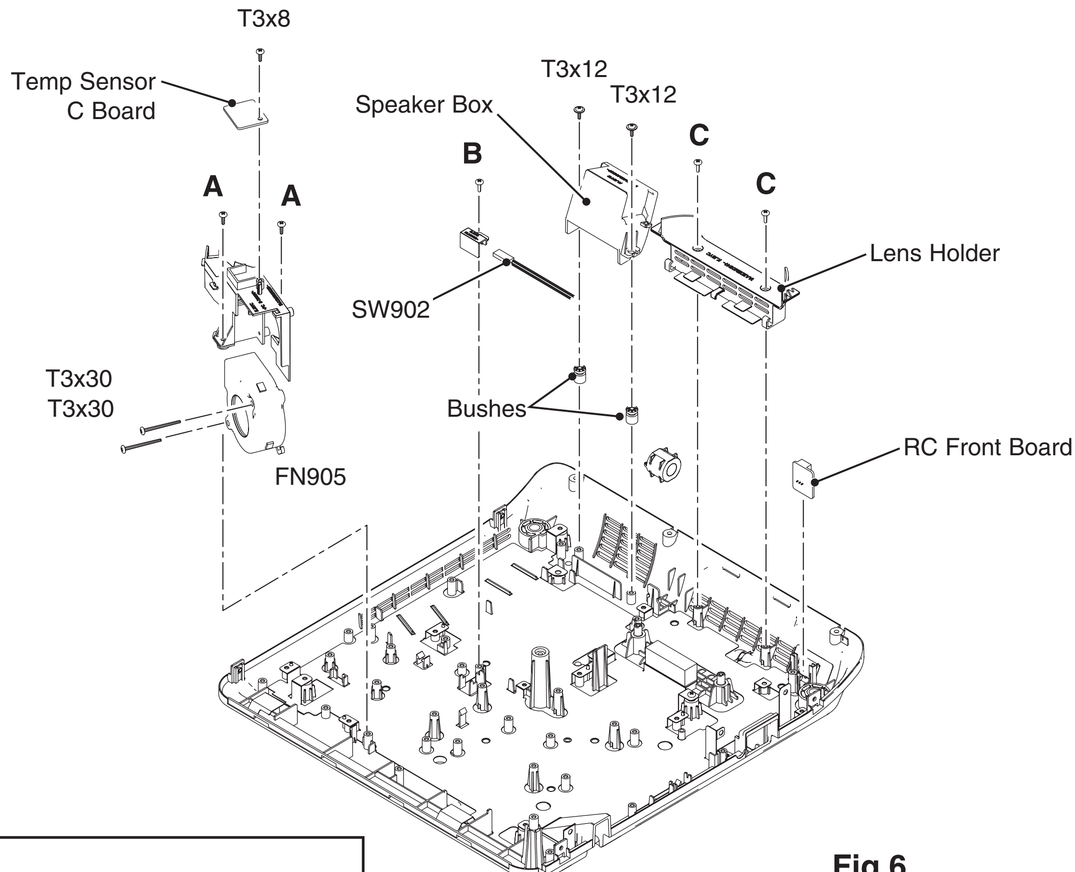


Fig.5

6 Fan (FN905), SW902, Temp Sensor C, RC Front Board removal

1. Remove 2 screws A(T3x8) to remove the Duct Ass'y. Remove Fan (FN905) and Temp Sensor C Board.
2. Remove 1 screw B(T3x8) to remove the Thermal Switch Holder and Thermal Switch (SW902).
3. Remove 2 screws C(T3x8) to remove the Lens Holder. Pull the RC Front Board upward off.



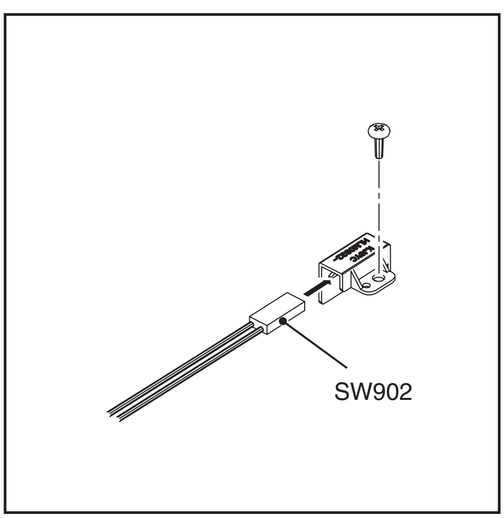


Fig.6

Optical Parts Disassembly

Before taking this procedure, remove AV Panel, Cabinet Top and Main Board following to the “Mechanical Disassembly”.
Disassembly requires a 2.0mm hex wrench and a screwdriver.

1 Projection lens removal

Note: The Main Board Holder should be removed from the cabinet bottom before removing the projection lens.

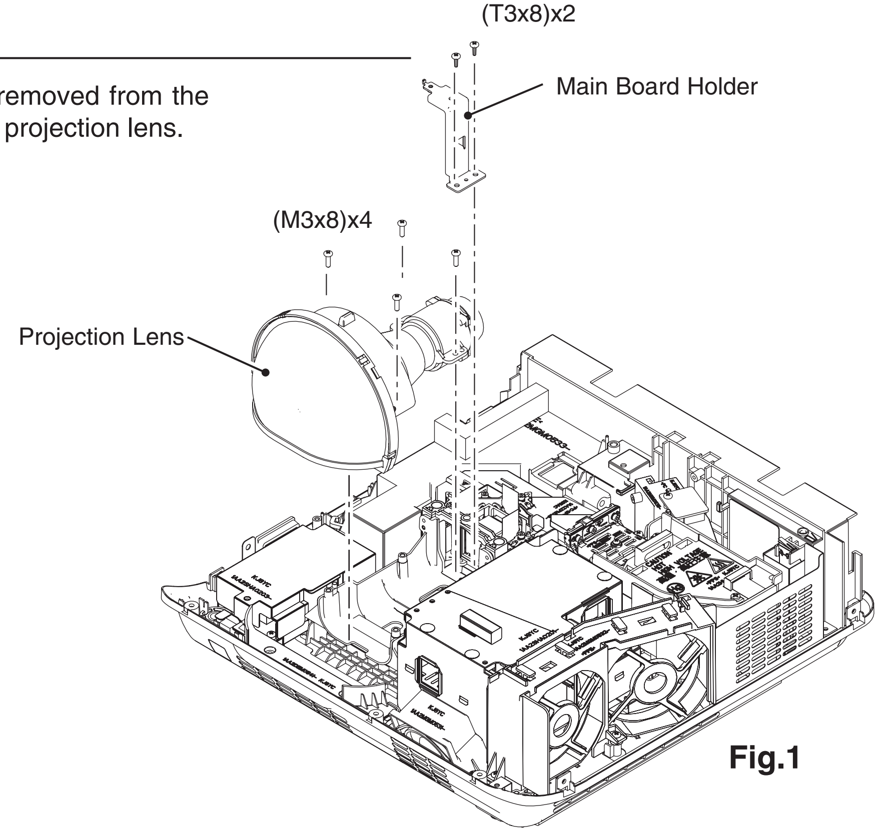


Fig.1

2 Condenser Out lens disassembly

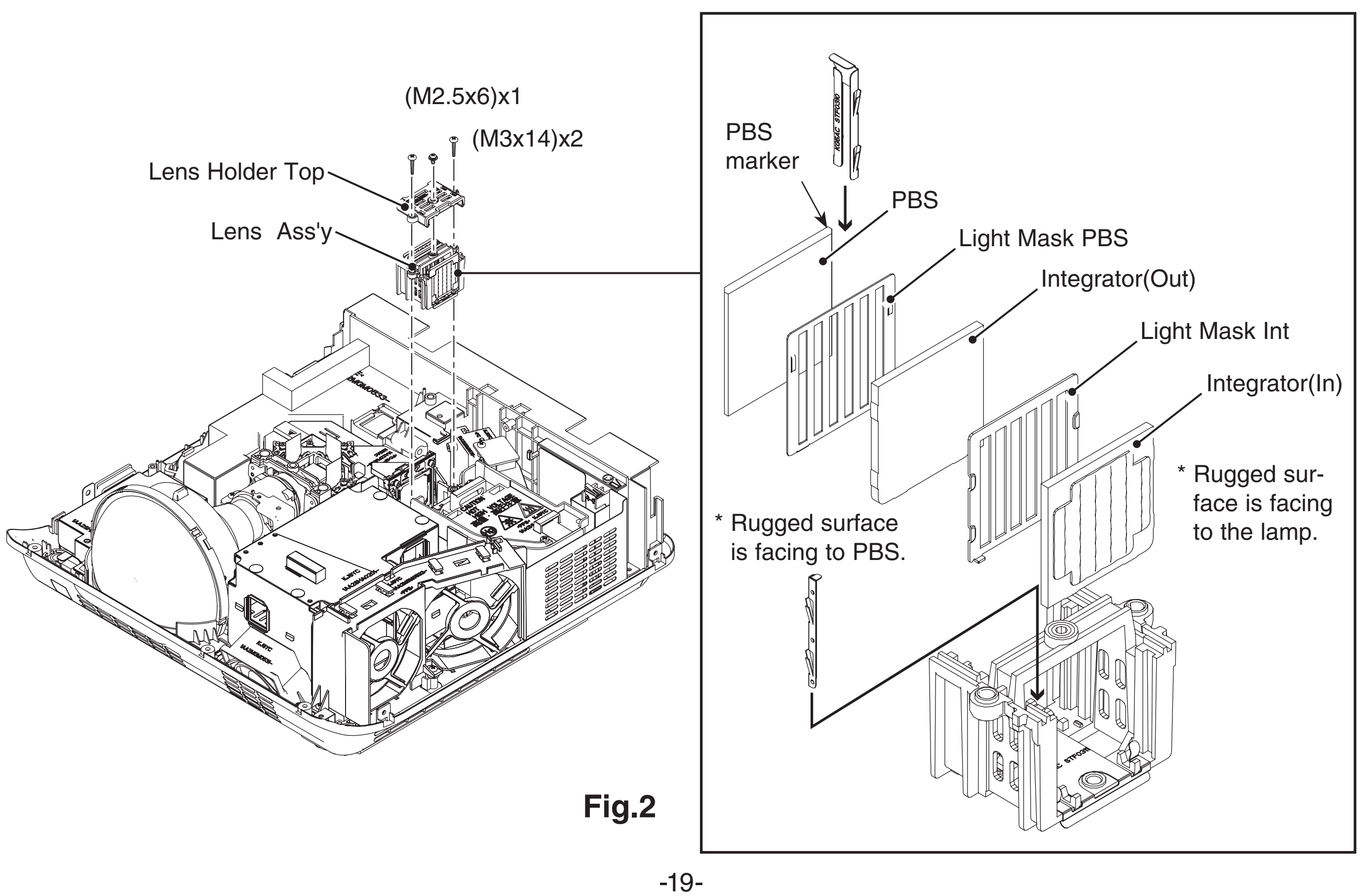


Fig.2

3 Condenser Lens Ass'y disassembly

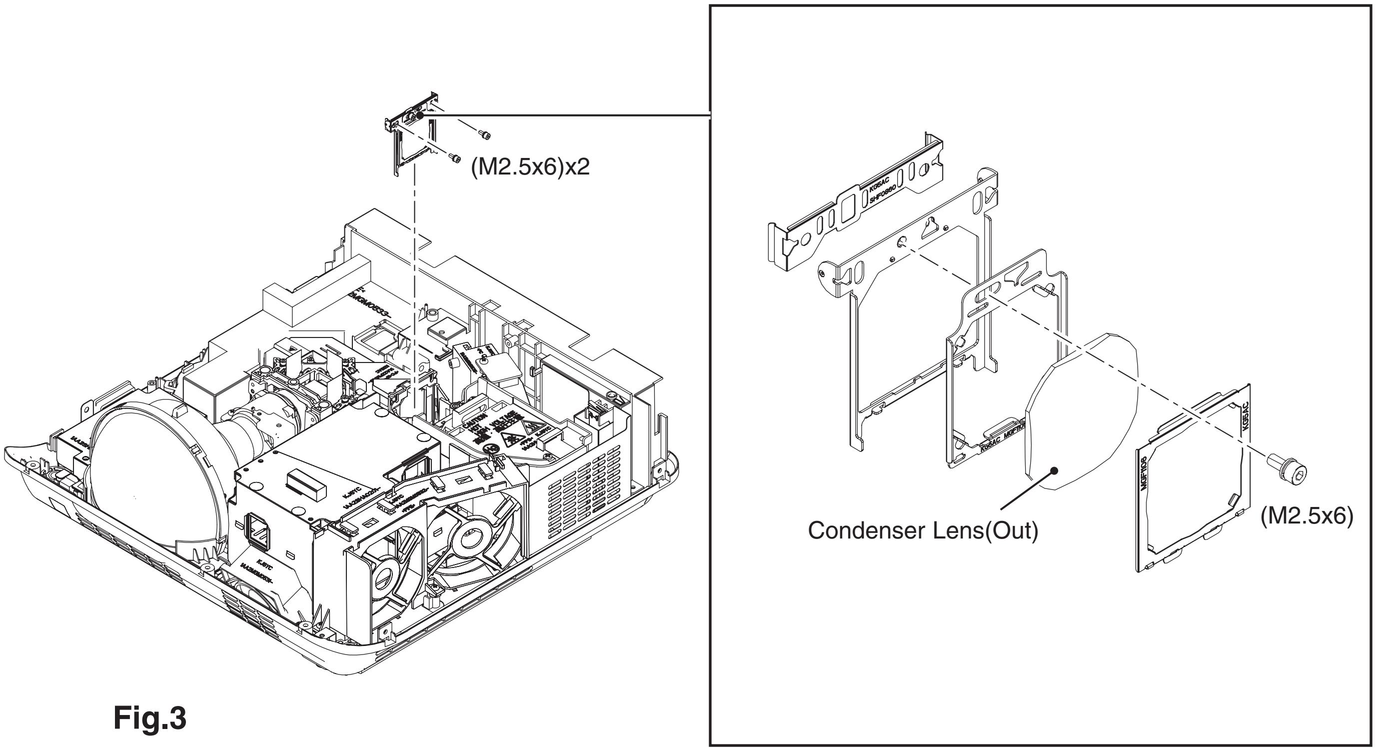
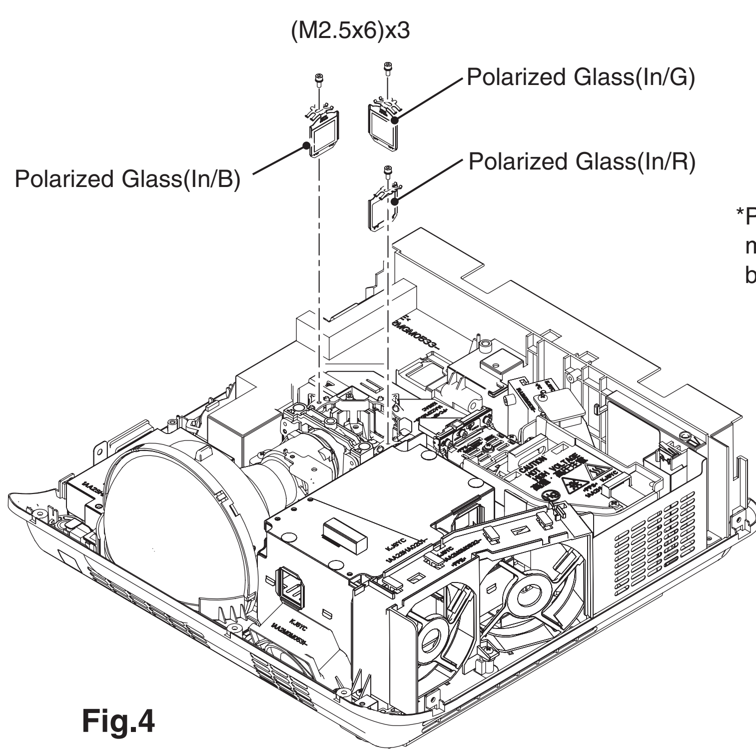


Fig.3

4 Polarized Glasses removal



*Polarized glass is not re-moved from the mounting base.

Fig.4

5 LCD Panel/Prism Ass'y removal

Loosen 1 screw A and then pull the Panel/Prism Ass'y upward off.

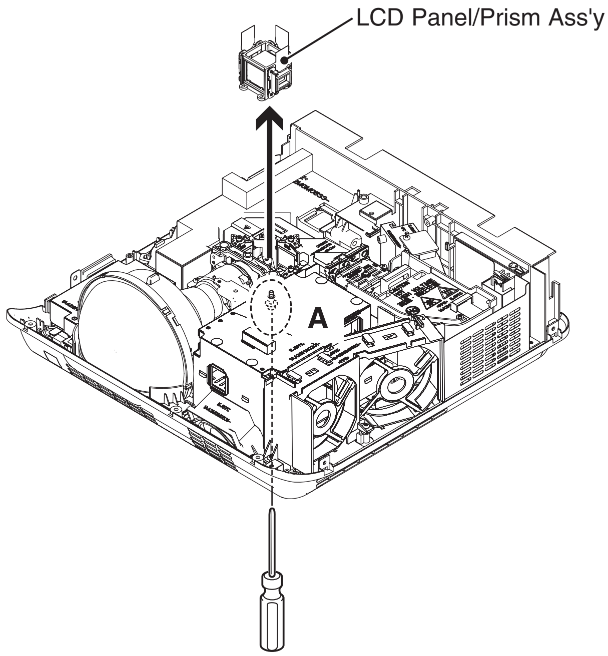


Fig.5-1

IMPORTANT NOTICE on LCD Panel/Prism Ass'y Replacement
LCD panels used for this model can not be replaced separately. Do not disassemble the LCD Panel/Prism Ass’y. These LCD panels are installed with precision at the factory. When replacing the LCD panel, should be replaced whole of the LCD panels and prism ass’y at once.
When replacing the LCD Panel/Prism ass'y, take the optical and electrical adjustments following to the chapter "Adjustment".

Panel Type Check

There are 2 types of LCD Panel/Prism Ass'y for this model. Either L-Type or R-Type LCD Panel/Prism Ass'y is used on the projector. Check which type of LCD Panel/Prism Ass'y is used with the figure below.
When replacing the LCD Panel/Prism Ass'y, you need to take "Panel Type Check and Setting" on the Electrical Adjustment for the replaced LCD Panel/Prism Ass'y.
The gamma-characteristics is different between L-Type and R-Type LCD Panel/Prism Ass'y.

How to check the type of LCDPanel/Prism Ass'y
Check the printed number on the flat cable of the G-LCD Panel.

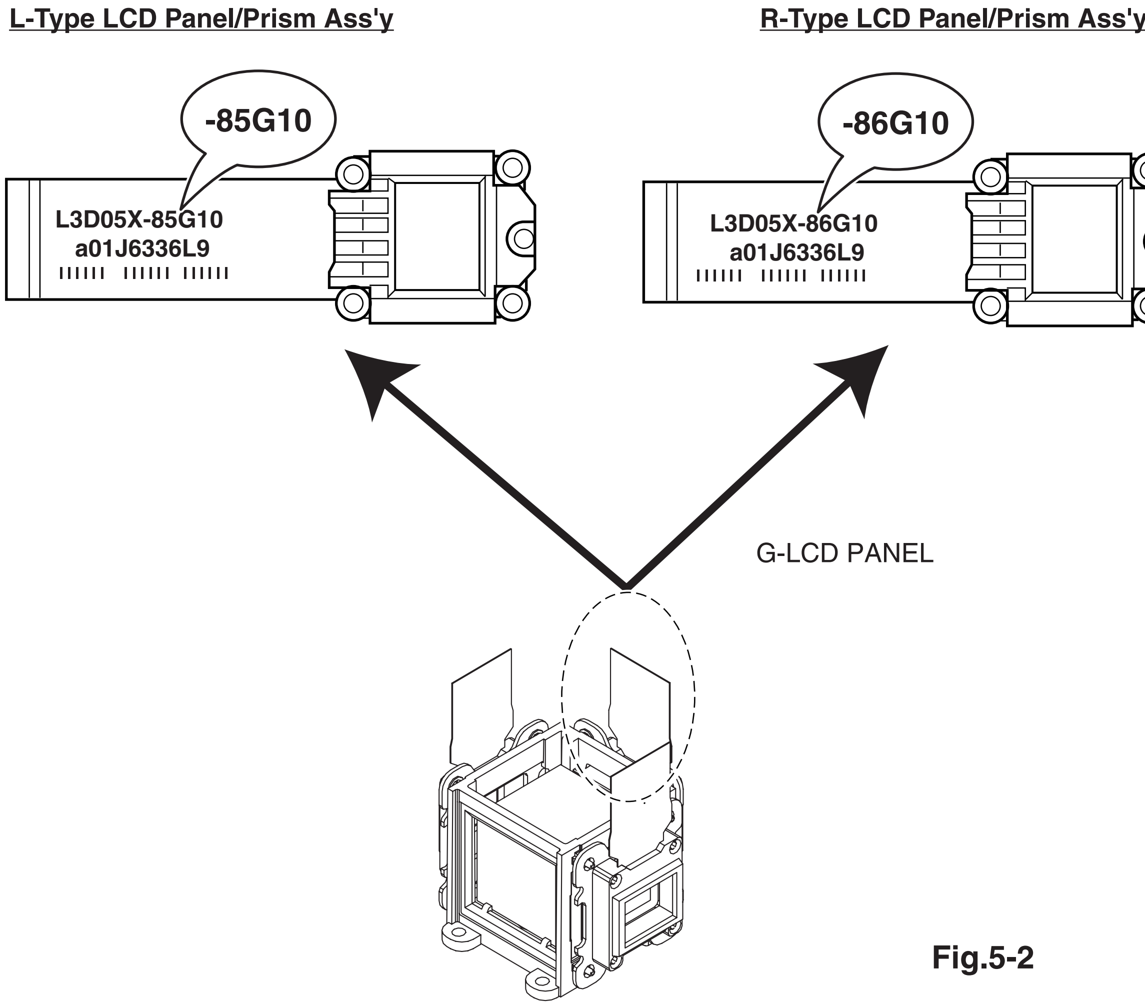


Fig.5-2

6 Optical Unit Top removal

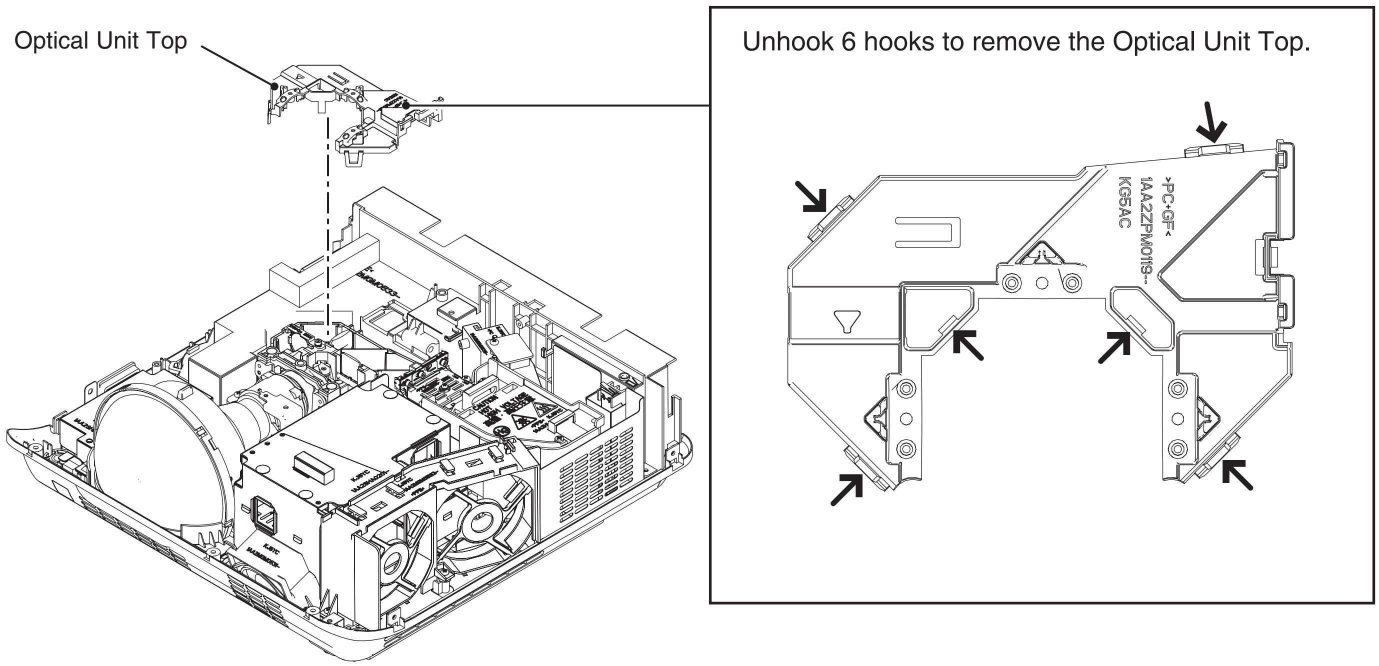


Fig.6

7 Relay Lens(Out) Ass'y removal

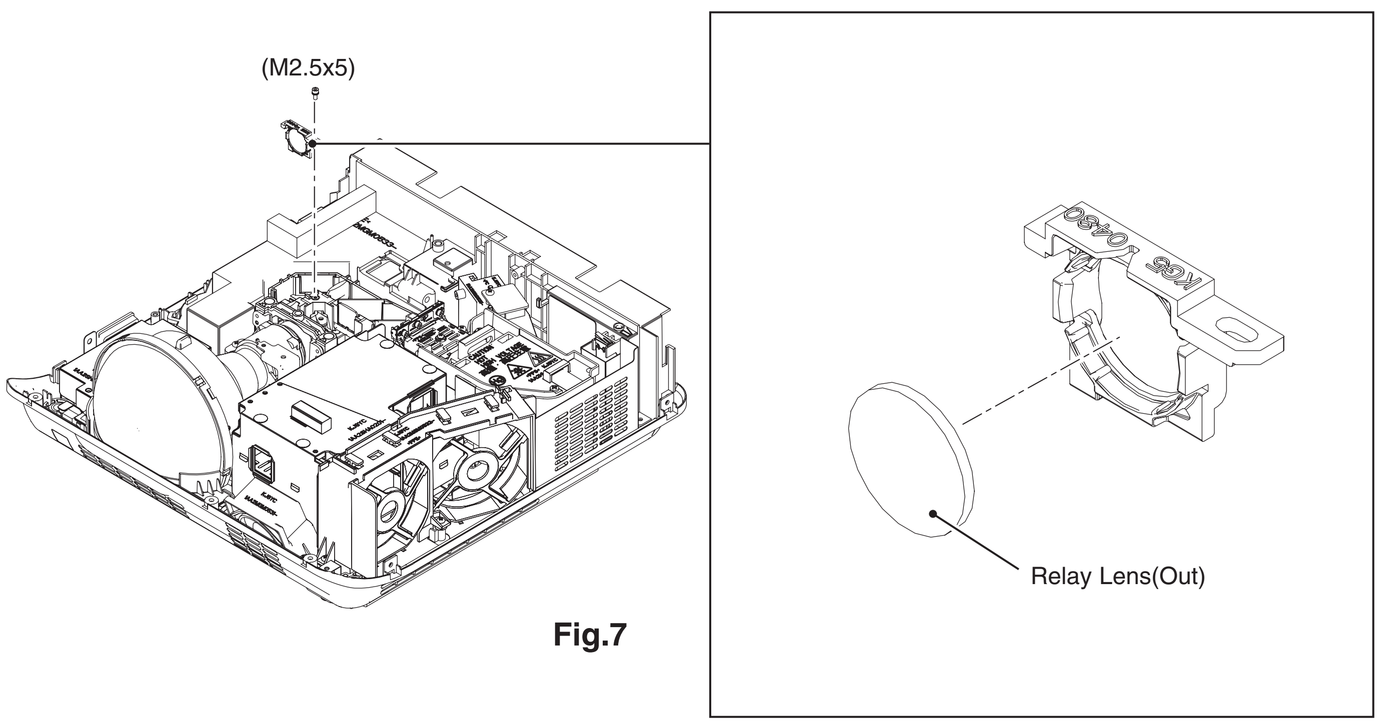


Fig.7

7 Locations and Directions

When mounting or assembling the optical parts in the optical unit, the parts must be mounted in the specified location and direction as shown in figure below.

No.	Parts Name
1	Dichroic mirror (B)
2	Dichroic mirror (G)
3	Condenser Lens (G)
4	Relay Lens (IN)
5	Mirror (R)
6	Condenser Lens (R)
7	Condenser Lens (B)
8	Mirror (B)

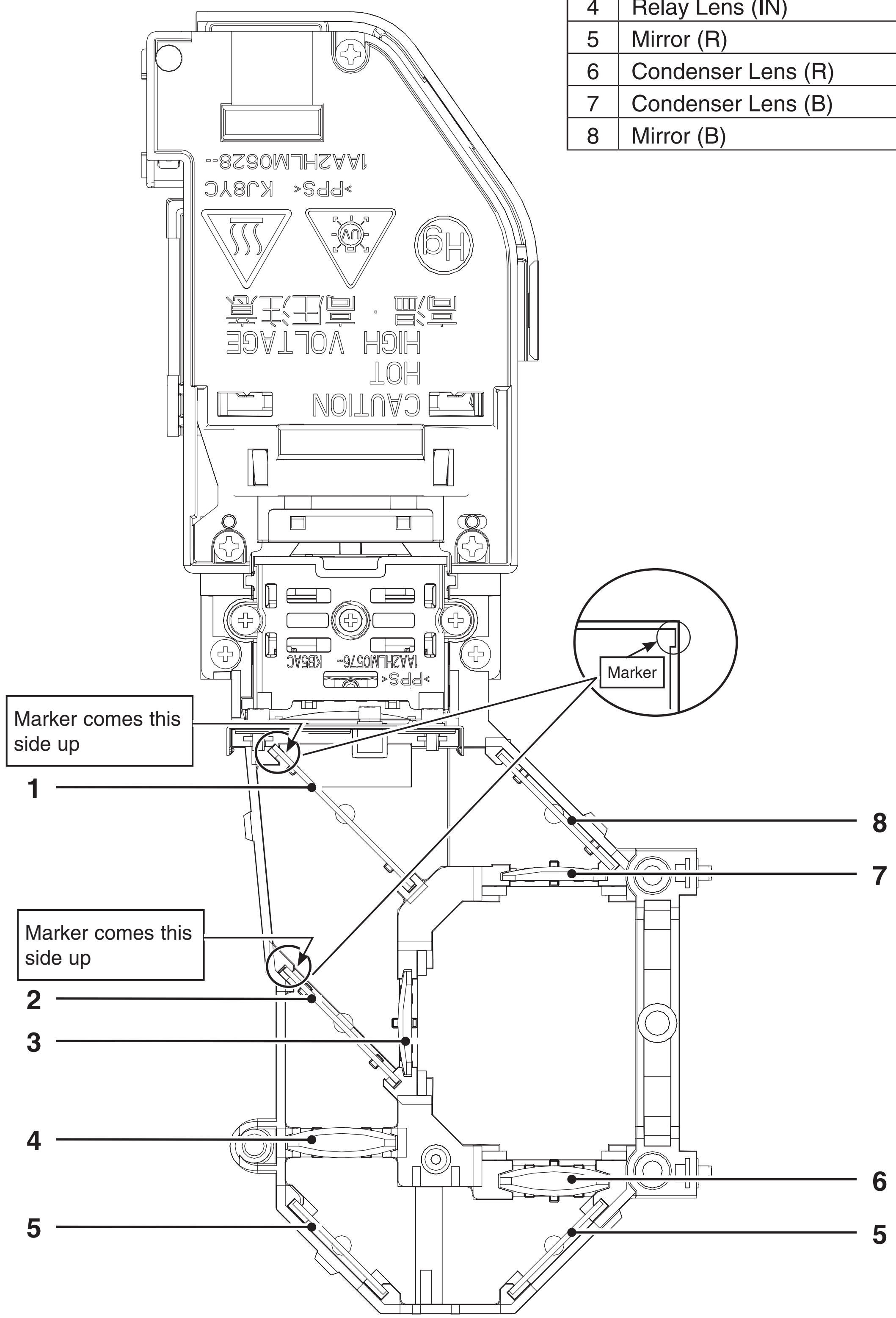


Fig.8

Adjustments

Adjustments after Parts Replacement

● : Adjustment necessary ❍ : Check necessary

		Disassembly / Replaced Parts							
		LCD/ Prism Ass'y	Condenser Lens (OUT)	Relay Lens (OUT)	Polarized Glass			Power Board	Main Board
					R	G	B		
Optical Adj.	Contrast Adjustment				●	●	●		
	Condenser lens adjustment	❍	●						
	Relay lens-out adjustment	❍		●					
Electrical Adjustments	Fan voltage adjustment							●	●
	Black level adjustment								●
	Panel type check and setting	●							●
	Auto calibration adjustment [PC]								●
	Auto calibration adjustment [Component]								●
	Auto calibration adjustment [Video]								●
	Common center adjustment	●							●
	50% white adjustment [PC]	●							●
	50% white adjustment [Video]	●							●
	White balance adjustment [PC]	❍	❍	❍	❍	❍	❍		❍
	White balance adjustment [Video]	❍	❍	❍	❍	❍	❍		❍
	Color shading correction adjustment *	❍							❍

* To adjust this item, the Projector Service Tool v. 4.20 software is needed. Refer to the owner's manual for this software for the further details.

Note on Main Board Replacement

● Memory IC replacement (IC1371)

Memory IC (IC1371) on the main board stores the user control value including lamp used time. When the main board is replaced with new one, the lamp used time will be reset. To keep the lamp use time, the memory IC should be replaced with the one on previous main board.

Optical Adjustments

Before taking optical adjustments below, remove the AV Panel and Cabinet Top following to the “Mechanical Disassembly”.

Optical adjustment requires a 2.0mm hex wrench and a slot screwdriver.

WARNING : USE UV RADIATION EYE AND SKIN PROTECTION DURING SERVICING

CAUTION: To prevent suffer of UV radiation, those adjustment must be completed within 25 minutes. DURING SERVICING

Contrast adjustment

[Before Adjustment]
- Input a 100% of black raster signal.

1 Loosen a screw **A (Fig.1)** on the polarized glass mounting base which you intend to adjust.
2 Adjust the slot **B** to obtain the darkest brightness on the screen by using a slot screwdriver.
3 Tighten the screw **A** to fix the polarized glass mounting base.

Repeat steps 1 to 3 for remaining polarized glasses.

- This adjustment should be taken in order of G-panel, R-panel and B-panel.
- This adjustment should be taken in the darkest room to adjust preciously.

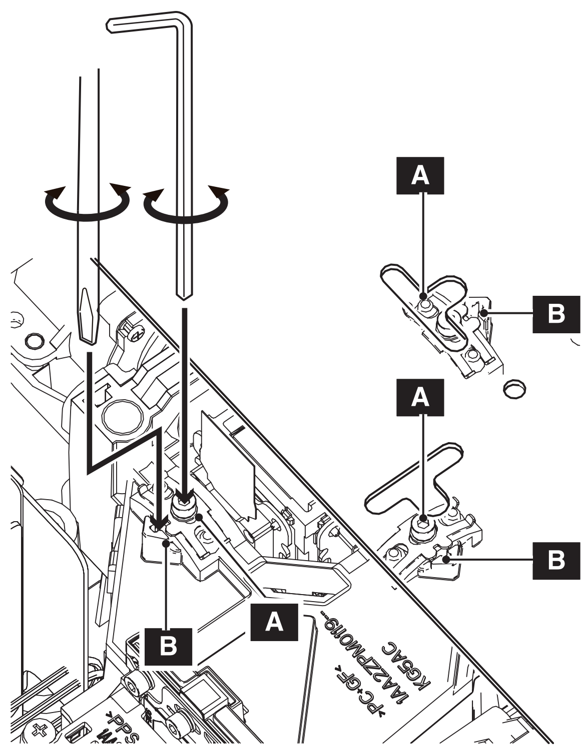
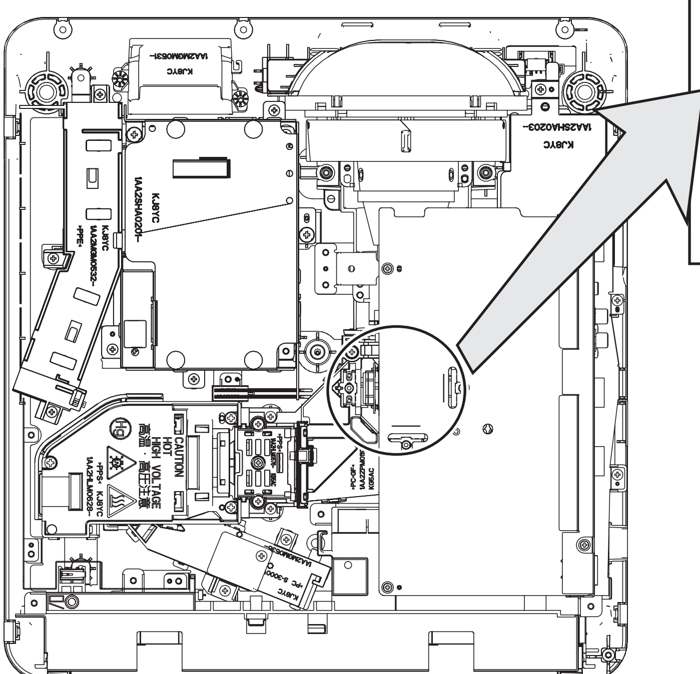


Fig.1



Condenser lens (Out) adjustment

1 Turn the projector on by a state of without FPC cables.
2 Project all of lights on the screen.
3 Adjust the adjustment base of condenser lens out assy to make color uniformity in white.
   1) If the shading appears on the left or right of the screen as shown in **Fig.2-1**, loosen 1 screw **C** , and adjust the slot **D** to make color uniformity in white by using a slot screwdriver.
   2) If the shading appears on the top or bottom of the screen as shown in **Fig.2-2**, loosen 2 screws **E**, and adjust the slots **F** to make color uniformity in white by using a slot screwdriver
4 Tighten screws **C** and **E** to fix the condenser lens out unit.

Note:
The relay lens adjustment must be carried out after completing this adjustment.

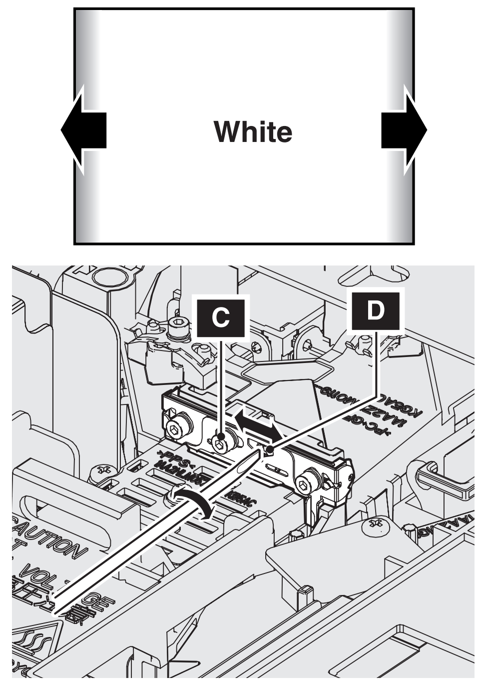


Fig.2-1
Moving of Slot D

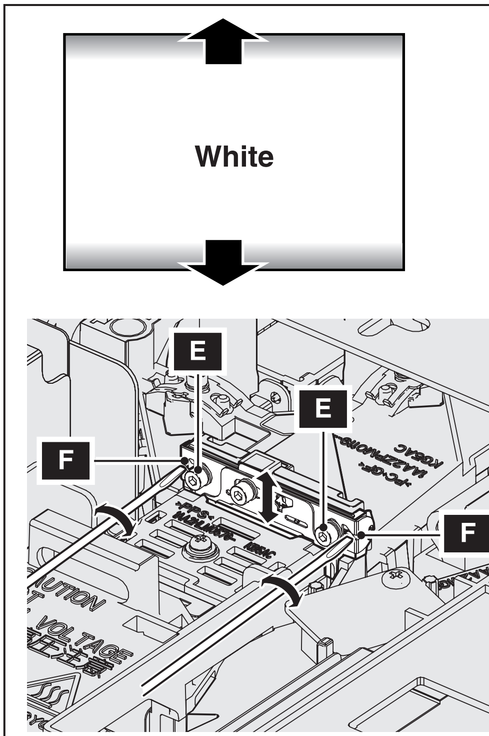
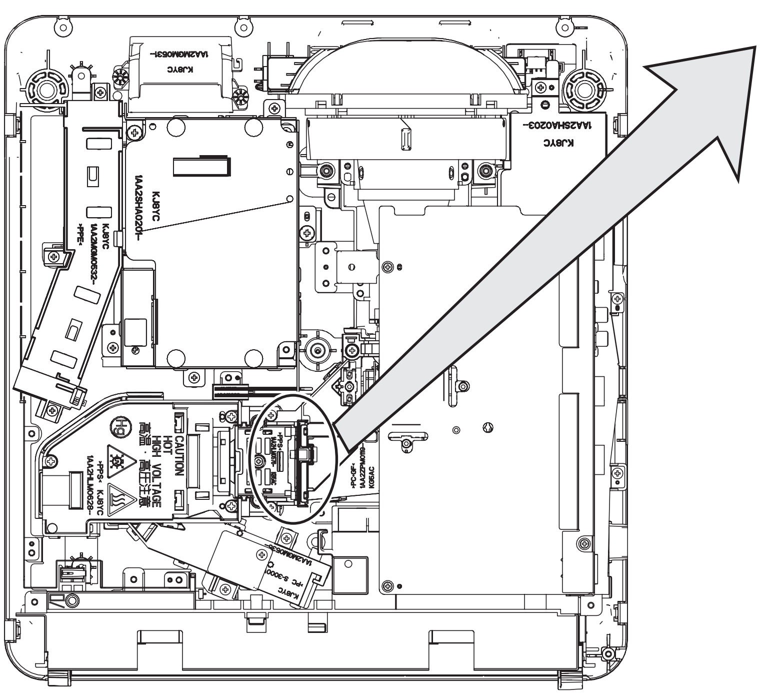


Fig.2-2
Moving of slot F



Relay lens (Out) adjustment

1 Turn the projector on by a state of without FPC cables.
2 Project all of lights on the screen.
3 Adjust the adjustment base of relay lens assy to make color uniformity in white.
If the shading appears on the left or right of the screen as shown in **Fig.3**, loosen 1 screw **G** by using a hex screwdriver, and adjust the slot **H** to make color uniformity in white by using a slot screwdriver.
4 Tighten the screw **G** to fix the relay lens unit.



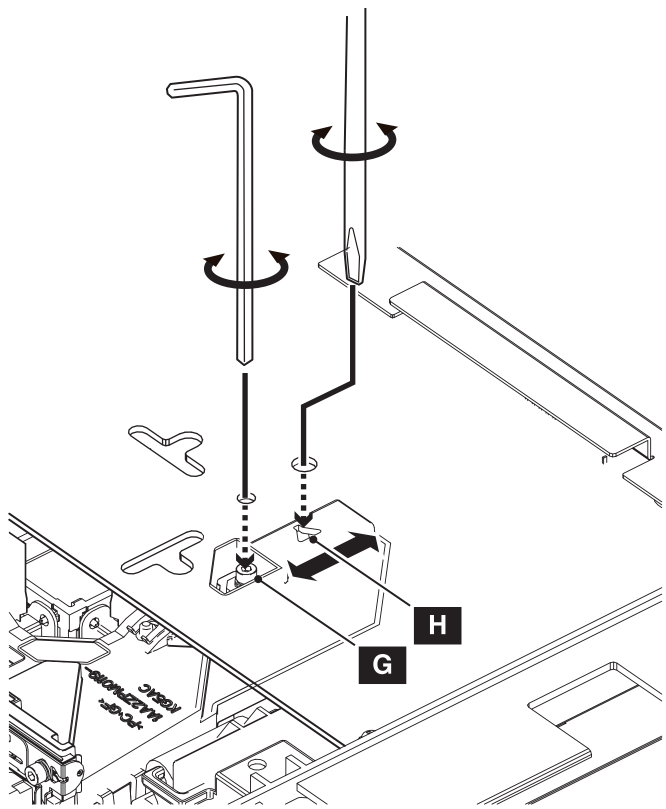
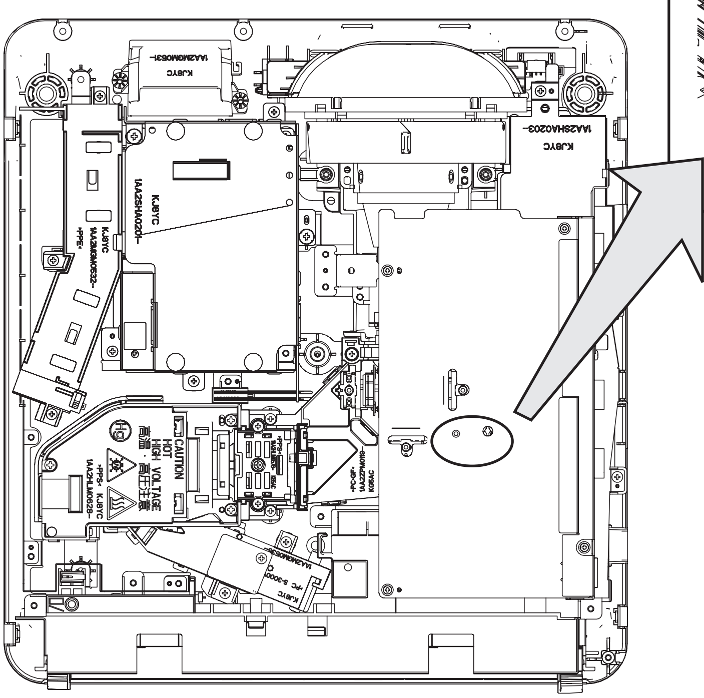


Fig.3
Moving of Slot H

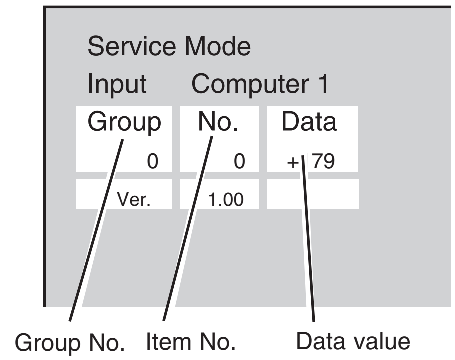


Electrical Adjustments

Service Adjustment Menu Operation

To enter the service mode

To enter the "Service Mode", press and hold the **MENU button** on the remote control for more than 20 seconds. The service menu appears on the screen as follows.



To adjust service data

Select the adjustment group no. by pressing the **MENU button** (increase) or **SELECT button** (decrease), and select the adjustment item no. by pressing the pointer ▲ or ▼ **button**, and change the data value by pressing the ◀ or ▶ **button**. Refer to the "Service Adjustment Data Table" for further description of adjustment group no., item no. and data value.

To exit the service mode

To exit the service mode, press the **ON/STAND-BY button** on the remote control.

Circuit Adjustments

CAUTION: The each circuit has been made by the fine adjustment at factory. Do not attempt to adjust the following adjustments except requiring the readjustments in servicing otherwise it may cause loss of performance and product safety. Before adjustment, please turn on the projector more than ten minutes.

WARNING : USE UV RADIATION EYE AND SKIN PROTECTION DURING SERVICING.

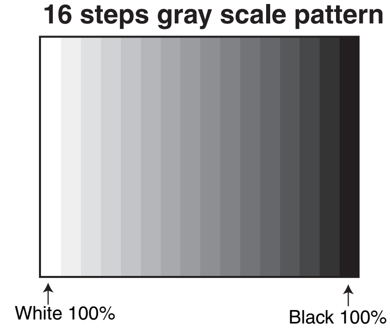
CAUTION:
To prevent suffer of UV radiation, those adjustments must be completed within 25 minutes.

[Adjustment Condition]

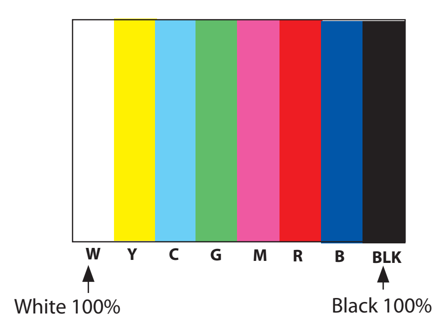
- Input signal
  - Analog Computer signal ..... 0.7Vp-p/75Ω terminated (WXGA)
  - Composite Video signal .... 1.0Vp-p/75Ω terminated (NTSC / PAL)
  - Component Video signal .... 0.7Vp-p/75Ω terminated (480i)
- Picture control mode........... "STANDARD" mode unless otherwise noted.
- Lamp control....................... "Normal" mode unless otherwise noted.

Note:
* Please refer to "Service Adjustment Menu Operation" for entering the service mode and adjusting the service data.

16 steps gray scale pattern



8 color 100% color bar



1 Fan Voltages adjustment

Equipment Digital voltmeter

1. Enter the service mode.
2. Connect the Digital voltmeter to the test point listed below.
3. Adjust the voltage on each test point by changing the data values of the Group - No.

Group	No.	Test Point	Adjustment value
250 -	**0**	TPFANA	**4.5 ±0.1Vdc**
250 -	**1**	TPFANA	**13.5 ±0.1Vdc**
250 -	**2**	TPFANB	**5.0 ±0.1Vdc**
250 -	**3**	TPFANB	**13.5 ±0.1Vdc**
250 -	**4**	TPFANC	**5.0 ±0.1Vdc**
250 -	**5**	TPFANC	**13.5 ±0.1Vdc**

2 Black Level adjustment

Input mode Computer 1 (RGB) mode
Input signal 16-step gray scale computer signal
Equipment Digital voltmeter

1. Enter the service mode.
2. Connect the Digital voltmeter to the test point listed below.
3. Adjust the voltage by changing the data values of the Group - No.

Group	No.	Test Point	Adjustment value
101 -	**16**	TP_VREF	**10.0 ±0.01Vdc**

3 Panel Type Check and Setting

* Before setting, you need to check which type of LCD panel is placed on the projector according to the item "LCD Panel/Prism Ass'y removal" in the chapter "Optical Parts Disassembly".

1. Enter the service mode.
2. Panel Type Check
   Select group no. “**290**”, item no. “**0**”. Check the data value as follows;
   Data value: 0 For L-Type of LCD Panel
   Data value: 20 For R-Type of LCD panel
   If the mounted LCD panel type and set Panel mode are differ, take the step below.
3. Panel Type Mode Setting
   Select group no. “**290**”, item no. “**1**” and change data value from 10 to 0 or 20 depending on your LCD Panel type. When the data value reaches 0 or 20, it returns to 10 quickly. The gamma-characteristics changes according to your selection.

Note:
Be careful to take this adjustment. The value of gamma adjustment data will be reset and cannot be restored if you change the mode of LCD panel type

4 PC Auto calibration

Input mode Computer 1 (RGB) mode
Input signal 16-step gray scale computer signal

1. Enter the service mode.
2. Select Group "**260**", No. "**0**" and set data value "**0**" to "**1**".
   The projector begins auto-calibration and then "OK" will appear on the screen.

5 Component Auto calibration

Input mode Computer 1 (Component) mode
Input signal 100% color bar signal (480i)

1. Enter the service mode.
2. Select Group "**260**", No. "**0**" and set data value "**0**" to "**1**".
   The projector begins auto-calibration and then "OK" will appear on the screen.

6 Video Auto calibration

Input mode Video (Video) mode
Input signal 16-step gray scale composite video signal

1. Enter the service mode.
2. Select Group "**260**", No. "**0**" and set data value "**0**" to "**1**".
   After the auto-calibration completed, "OK" will appear on the screen.

Adjustments item no. [4] to [6] are carried out at the spare parts shipment in the factory, therefore they are not required when the main board is replaced with new one.

PC, Video, Component Manual adjustment

When the PC, Video or Component Auto Calibration fails, take the following manual adjustment instead of auto calibration.

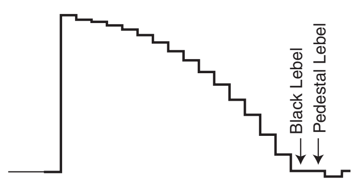
[1] Manual adjustment (PC)

Input mode — Computer 1 (RGB) mode
Input signal — 16-step gray scale computer signal

- Pedestal adjustment

1. Enter the service mode.
2. Adjust the pedestal level and black level to be the same level by changing the data values of the Group - No.

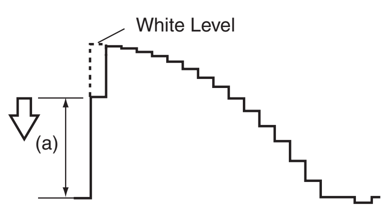
Group No.	Test Point	Adjustment
0 - 0	TP35G	ADC G-Offset
0 - 1	TP35R	ADC R-Offset
0 - 2	TP35B	ADC B-Offset



- Gain adjustment

1. Enter the service mode.
2. Adjust the amplitude “**a**” to be minimum by changing the data values of the Group - No.

Group No.	Test Point	Adjustment
0 - 3	TP35G	ADC G-Gain
0 - 4	TP35R	ADC R-Gain
0 - 5	TP35B	ADC B-Gain



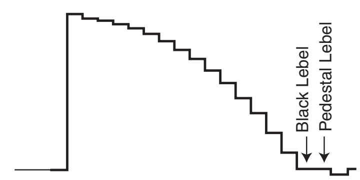
[2] Manual adjustment (Component)

Input mode — Computer 1 (Component) mode
Input signal — 16-step gray scale component signal (480i)

- Pedestal adjustment

1. Enter the service mode.
2. Adjust the pedestal level and black level to be the same level by changing the data values of the Group - No.

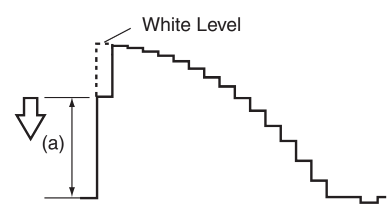
Group No.	Test Point	Adjustment
0 - 0	TP35G	ADC G-Offset
0 - 1	TP35R	ADC R-Offset
0 - 2	TP35B	ADC B-Offset



- Gain adjustment

1. Enter the service mode.
2. Adjust the amplitude “**a**” to be minimum by changing the data values of the Group - No.

Group No.	Test Point	Adjustment
0 - 3	TP35G	ADC Y-Gain



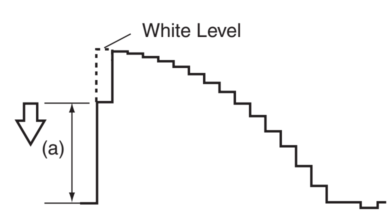
[3] Manual adjustment (Video)

Input mode — Video (Video) mode
Input signal — 16-step gray scale composite video signal

- Gain adjustment

1. Enter the service mode.
2. Adjust the amplitude “**a**” to be minimum by changing the data values of the Group - No.

Group No.	Test Point	Adjustment
20 - 0	TP35G	Y-Level



7 Common Voltage adjustment

Input mode	Computer 1 (RGB)
Input signal	50%-RGB pattern computer signals or 16-step gray scale computer signal

1. Enter the service mode.
2. Select Group "**100**", No. "**92**" and then change data value from "**0**" to "**2**" to reduce the panel frequency.
3. Change data value to obtain **the minimum flicker** for each color on screen.

Group	No.	Adjustment
101	**0**	**for red flicker**
101	**1**	**for green flicker**
101	**2**	**for blue flicker**

4. Select Group "**100**", No. "**92**" and then change data value from "**2**" to "**0**".

8 50% White adjustment [PC]

Equipment	Luminance meter
Input mode	Computer 1 (RGB)
Input signal	100%-white and 50%-gray computer signal

1. Enter the service mode.
2. Input the 100%-white computer signal and measure luminance on the screen with the luminance meter. It is **A** for the reading of luminance meter.
3. Change the signal source to the 50%-white computer signal.
4. Select group no. “**100**”, item no. “**6**” and change the Data value to make the reading of luminance meter to be **A x 22%.**

9 50% White adjustment [Video]

Equipment	Luminance meter
Input mode	Video (Video)
Input signal	100%-white and 50%-gray composite video signal

1. Enter the service mode.
2. Input the 100%-white composite video signal and measure luminance on the screen with the luminance meter. It is **A** for the reading of luminance meter.
3. Change the signal source to the 50%-white composite video signal.
4. Select group no. “**100**”, item no. “**6**” and change the Data value to make the reading of luminance meter to be **A x 22%.**

10 White Balance adjustment [PC]

Input mode	Computer 1 (RGB) mode
Input signal	16-step gray scale or 50% white pattern computer signal

1. Enter the service mode.
2. Change data value to obtain the proper white balance.

Group	No.	Adjustment
100	**7**	**Red color balance**
100	**8**	**Blue color balance**

11 White Balance adjustment [Video]

Input mode	Video (Video) mode
Input signal	16-step gray scale or 50% white pattern composite video signal

1. Enter the service mode.
2. Change data value to obtain the proper white balance.

Group	No.	Adjustment
100	**7**	**Red color balance**
100	**8**	**Blue color balance**

12 Color Shading Correction adjustment

Software PROJECTOR SERVICE TOOL v4.20

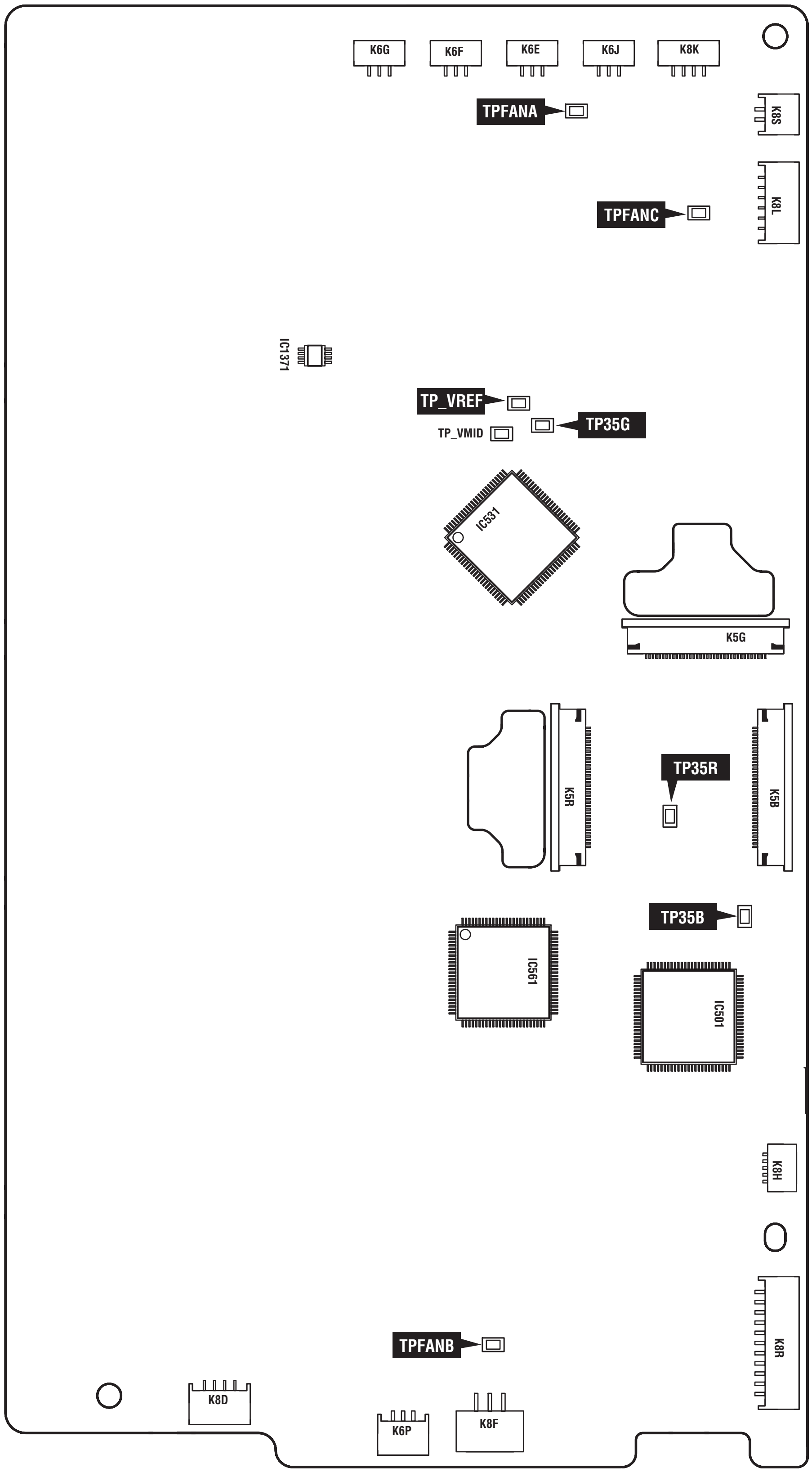
Use the software to correct the color shading of the screen. See the further information of the software instruction manual.
The color shading correction adjustment for this model should be performed with the whole-gray patterns specified as below.

4-input patterns:
6.25% gray, 12.5% gray, 25% gray, 50% gray

> The Color Shading Correction software CD-ROM can be ordered with following service code.
> **PROJECTOR SERVICE TOOL CD-ROM v4.20**
> **SERVICE CODE: 610 343 5596**

Test Points and Locations

MAIN BOARD



Service Adjustment Data Table

These initial values are the reference data written from the CPU ROM to memory IC when replaced new memory IC. The adjustment items indicated with "*" are required to readjust following to the "Electrical adjustments". Other items should be used with the initial data value.

Group/ Item	Item Name	Function	Initial	Range	Note
Group 0	**AD Converter (PW190)**				
0	ADC G-OFFSET	PC / Component / SCART	128/120/128	0 - 255	* G-Pedestal Adjustment
1	ADC R-OFFSET	PC / Component / SCART	128/140/128	0 - 255	* R-Pedestal Adjustment
2	ADC B-OFFSET	PC / Component / SCART	128/140/128	0 - 255	* B-Pedestal Adjustment
3	ADC G-GAIN	PC / Component / SCART	50/50/50	0 - 255	* Gain Adjustment
4	ADC R-GAIN	PC / Component / SCART	40/40/40	0 - 255	
5	ADC B-GAIN	PC / Component / SCART	40/40/40	0 - 255	
6	GRAAFLTR/RBAAFLTR	Green (Red and Blue) Anti-Alias Filter	4 / R / R	0 - 7	
7	GRNAADWNSMPL / RBAADWNSMPL	Green (Red and Blue) Anti-Alias Downsample	0 / R / R	0 - 3	Composite & S-Video / Component / PC
8	GRNAAHF / RBAAHF	Green (Red and Blue) Anti-Alias High Frequency	3 / R / R	0 - 3	*R: Read only value
10	SOGTH	PC / Component / SCART SyncOn Green Threhould	9 / 9 / 6	0 - 15	
11	SOGHYSDIS	PC / Component / SCART Sync On Green Hsysterisis Enable	0	0 - 1	
12	HS1TH		4	0 - 7	
13	HS0TH		4	0 - 7	
100	PreCoast PC Signal		3	0 - 63	
101	PostCoast PC Signal		8	1 - 63	
120	PreCoast PC Video 480i		7	0 - 63	
121	PostCoast PC Video 480i		13	0 - 63	
122	PreCoast PC Video 575i		7	0 - 63	
123	PostCoast PC Video 575i		13	0 - 63	
124	PreCoast PC Video 480p		7	0 - 63	
125	PostCoast PC Video 480p		13	0 - 63	
126	PreCoast PC Video 575p		7	0 - 63	
127	PostCoast PC Video 575p		13	0 - 63	
128	PreCoast PC Video 720p 60Hz		7	0 - 63	
129	PostCoast PC Video 720p 60Hz		13	0 - 63	
130	PreCoast PC Video 720p 50Hz		7	0 - 63	
131	PostCoast PC Video 720p 50Hz		13	0 - 63	
132	PreCoast PC Video 1080i 60Hz		7	0 - 63	
133	PostCoast PC Video 1080i 60Hz		13	0 - 63	
134	PreCoast PC Video 1080i 50Hz		7	0 - 63	
135	PostCoast PC Video 1080i 50Hz		13	0 - 63	
136	PreCoast PC Video 1035i		7	0 - 63	
137	PostCoast PC Video 1035i		13	0 - 63	
138	PreCoast PC Video 1080p 60Hz		7	0 - 63	
139	PostCoast PC Video 1080p 60Hz		13	0 - 63	
140	PreCoast PC Video 1080p 50Hz		7	0 - 63	
141	PostCoast PC Video 1080p 50Hz		13	0 - 63	
142	PreCoast PC Video 1080p 30Hz		7	0 - 63	
143	PostCoast PC Video 1080p 30Hz		13	0 - 63	
144	PreCoast PC Video 1080p 25Hz		7	0 - 63	
145	PostCoast PC Video 1080p 25Hz		13	0 - 63	
156	PreCoast PC Video 1080p 24Hz		7	0 - 63	
147	PostCoast PC Video 1080p 24Hz		13	0 - 63	
150	PreCoast YCbCr 480i		7	0 - 63	
151	PostCoast YCbCr 480i		13	0 - 63	
152	PreCoast YCbCr 575i		7	0 - 63	
153	PostCoast YCbCr 575i		13	0 - 63	
154	PreCoast YCbCr 480p		7	0 - 63	
155	PostCoast YCbCr 480p		13	0 - 63	
156	PreCoast YCbCr 575p		7	0 - 63	
157	PostCoast YCbCr 575p		13	0 - 63	
158	PreCoast YCbCr 720p 60Hz		7	0 - 63	
159	PostCoast YCbCr 720p 60Hz		13	0 - 63	
160	PreCoast YCbCr 720p 50Hz		7	0 - 63	
161	PostCoast YCbCr 720p 50Hz		13	0 - 63	

Group/ Item	Item Name	Function	Initial	Range	Note
162	PreCoast YCbCr 1080i 60Hz		7	0 - 63	
163	PostCoast YCbCr 1080i 60Hz		13	0 - 63	
164	PreCoast YCbCr 1080i 50Hz		7	0 - 63	
165	PostCoast YCbCr 1080i 50Hz		13	0 - 63	
166	PreCoast YCbCr 1035i		7	0 - 63	
167	PostCoast YCbCr 1035i		13	0 - 63	
180	PreCoast SCART 480i		7	0 - 63	
181	PostCoast SCART 480i		13	0 - 63	
182	PreCoast SCART 575i		7	0 - 63	
183	PostCoast SCART 575i		13	0 - 63	
Group 10	**Sync Processor**				
0	SYNCAMPHLCKTOLOW	Minimum sync amplitude threshold for HLCK 1 to 0 tansition	0x700	0 - 9999	
1	SYNCAMPHLCKTOHI	Minimum sync amplitude threshold for HLCK 0 to 1 tansition	0x1000	0 - 9999	
Group 20	**Video Decoder**				*R : Read Only Value
0	Y Level	Composite / S-Video - Y Level (ADC RGB Gain)	10 / 10	0 - 255	* Gain adjustment Video
1	C Level	Composite / S-Video - C Level (ADC Saturation)	115 / 115	0 - 255	Composite / S-Video
2					
3	XCXL Level	Cross-Chroma, Cross-Luma Level	3	0 - 5	
4	C2DNBANDWIDTH	Comb 2D Narrow Bandwidth	3 / 3	0 - 3	
5	C2DWBANDWIDTH	Comb 2D Wide Bandwidth	4 / 4	0 - 7	NTSC/PAL
6	C2DCNMINLEAK	Comb 2D Chroma Narrow Band Minimum Leakage	0 / 3	0 - 3	Left Values are adjustable if CXCL Level = 5.
7	C2DCNSLOPELEAK	Comb 2D Narrow Band Slope Leakage	7 / 7	0 - 7	
8	C2DCWMINLEAK	Comb 2D Wide Band Minimum Leakage	1 / 3	0 - 3	
9	C2DCWSLOPELEAK	Comb 2D CW Slope Leakage	6 / 6	0 - 7	
10	COMBLEAK2BPGAIN	Comb Leak To Ban Pass Gain	1 / 0	0 - 3	
11	C2DBDIAGONALGAIN	Comb 2D Band Pass Diagonal Gain	1 / 3	0 - 3	
12	C2DNBCWBCLGAIN	Comb 2D Narrow Band Comb Wide Band Comb	1 / 1	0 - 3	
13	RLUMASETUP-Enable	7.5IRE Setup Enable	0	0 - 1	Effective only NTSC Signal
Group 40	**General**				
0	IP Mode	0: IP Block not used 1: IP OFF used with IP Block	1	0 - 1	
1	3:2 PullDown Mode	0: IP Block not used 1: IP OFF used with IP Block	1	1 - 3	
2	Detect Film Mode Enable	0 : 2:3pull down & 2:2pull down 1 : 2:3pull down 2 : 2:2pull down	0	0 - 2	
3	Force IP Mode	0 : IP Process Disable 1 : Force Normal IP Mode 2 : Force Film Mode Effective only for PSF Signal.	2	0 - 2	
Group 41	**Deinterlacer setting** Effective only for Progressive ON-L1 mode.				
0	Motion Adaptive Weight Value	<KDEINT>	30	0 - 255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	4	0 - 4	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0	0 - 1	
Group 42	**Deinterlacer setting** Effective only for Progressive ON-L2 mode.				
0	Motion Adaptive Weight Value	<KDEINT>	0	0 - 255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	2	0 - 4	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0	0 - 1	
Group 43	**Deinterlacer setting** Effective only for Progressive ON/Film mode.				
0	Motion Adaptive Weight Value	<KDEINT>	30	0 - 255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	4	0 - 4	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0	0 - 1	
Group 45	**Noise Reduction (Time)** Effective only for N.R - Off				
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0 - 2	
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0 - 1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0 - 1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0 - 1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	0	0 - 255	
Group 47	**Noise Reduction (Time)** Effective only for N.R L1				
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0 - 2	
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0 - 1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0 - 1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0 - 1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	50	0 - 255	
Group 49	**Noise Reduction (Time)** Effective only for N.R L2				
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0 - 2	

Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0 - 1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0 - 1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0 - 1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	100	0 - 255	
Group 50	**2:2pull down setting**				
0	22Film Mode Sensitivity	Film Detection Sensitivity <FILMSTVT22>	4	1 - 5	
1	22Film Mode Threshold Low	<FILMTHRD22A>	80	0 - 32767	
2	22Film Mode Threshold High	<FILMTHRD22B>	120	0 - 32767	
3	VOFTHR13	<VOFTHR13>	124	0 - 1023	Read only
4	VOFTHR12	<VOFTHR12>	124	0 - 1023	Read only
5	VOFTHR23	<VOFTHR23>	124	0 - 1023	Read only
6	Video Motion Window Start X	<VOFSTARX>	10	0 - 2047	Range of detective for Film mode
7	Video Motion Window Stop X	<VOFSTOPX>	10	0 - 2047	Range of detective for Film mode
8	Video Motion Window Start Y	<VOFSTARY>	10	0 - 1023	Range of detective for Film mode
9	Video Motion Window Stop Y	<VOFSTOPY>	10	0 - 1023	Range of detective for Film mode
Group 51	**2:3pull down setting**				
0	Global Motion Sensitivity	Film Detection Sensitivity <FILMSTVT23>	4	1 - 5	
1	Video Motion Sensitivity	Film Detection Sensitivity <VOFSTVT>	4	1 - 5	
2	Video Motion Threshold Low	<VOFTHRDA>	120	0 - 32767	
3	Video Motion Threshold High	<VOFTHRDB>	180	0 - 32767	
4	Global Motion Threshold	<GMDTHRD>	124	0 - 1024	
5	23Film Mode Threshold	<FILMTHRD23>	100	0 - 32767	
6	Global Motion Window Start X	<GMDSTARX>	10	0 - 2047	Range of detective for Film mode
7	Global Motion Window Stop X	<GMDSTOPX>	10	0 - 2047	Range of detective for Film mode
8	Global Motion Window Start Y	<GMDSTARY>	10	0 - 1023	Range of detective for Film mode
9	Global Motion Window Stop Y	<GMDSTOPY>	10	0 - 1023	Range of detective for Film mode
Group 60	**Image**				
0	Center Contrast		512/556/534/534/492/492	0 - 1023	
1	Center Brightness		512/480/512/500/512/512	0 - 1023	Video(S-Video) / Component / SCART / ANALOG / DIGITAL / HDCP Setting Value= (MENU Value - MENU Center Value) x Alpha / 10 + Center [Setting Value to PW] Contrast [Max] 1023 [Min] 0 Brightness [Max] 1023 [Min] 0 Color [Max] 1023 [Min] 0 Tint [Max] 180 [Min] 0 Sharpness [Max] 57 [Min] 0
2	Center Color		512/534/512/512/512/512	0 - 1023	
3	Center Tint		90/90/90/90/90/90	0-180	
4	Center Sharpness		16/16/16/16/16/16	7-49	
5	Alpha Contrast		40/40/40/40/40/40	0-1000	
6	Alpha Brightness		140/140/140/140/140/140	0-1000	
7	Alpha Color		70/70/70/70/70/70	0-1000	
8	Alpha Tint		10/10/10/10/10/10	0-1000	
9	Alpha Sharpness		10/10/10/10/10/10	0-1000	
Group 100	**Panel Service (7111)**				
0	G-SubGain		2048/2068/2024/2024/1950/1950/1830/1900/2048/2068/2024/2024/1950/1950/1830/1900	0 - 4095	
1	R-SubGain	PCStandard/PCDynamic/PCReal/PCBlackBoard/PCColBoaR/PCColBoaG_PCColBoaB/PCColBoaY/AVStandard.AVDynamic/AVCinema/AVBlackBoard/AVColBoaR/AVColBoarG/AVColBoaB/AVColBoaY	2048/2068/2024/2024/1850/2048/1950/2048/2048/2068/2024/2024/1850/2048/1950/2048	0 - 4095	
2	B-SubGain		2048/2068/2024/2024/2048/2000/2048/2048/2048/2068/2024/2024/2048/2000/2048/2048	0 - 4095	
3	G-SubBright		0/0/32/32/0/0/0/0/0/0/32/32/0/0/0/0	0 - 4095	
4	R-SubBright		0/0/32/40/0/30/0/32/0/0/32/40/0/32/0/32	0 - 4095	
5	B-SubBright		0/0/32/32/16/0/40/32/0/0/32/32/16/0/42/32	0 - 4095	
6	G-GammaShift	PC/AV	0/0	0 - 4095	R and B linked to G,* 50% White Adjustment
7	R-GammaShift	PC/AV	0/0	0 - 4095	* White Balance Adjustment
8	B-GammaShift	PC/AV	0/0	0 - 4095	* White Balance Adjustment
9	G_ReferH	Normal-Mount / Ceiling	4095 / 4095	0 - 4095	
10	G_ReferL	Normal-Mount / Ceiling	788 / 788	0 - 4095	R and B linked to G
11	R_ReferH	Normal-Mount / Ceiling	4095 / 4095	0 - 4095	
12	R_ReferL	Normal-Mount / Ceiling	788 / 788	0 - 4095	
13	B_ReferH	Normal-Mount / Ceiling	4095 / 4095	0 - 4095	R and B linked to G
14	B_ReferL	Normal-Mount / Ceiling	788 / 788	0 - 4095	
15	DXOUTR		250	0 - 1023	
16	DXOUTG		250	0 - 1023	
17	DXOUTB		250	0 - 1023	
18	H_Change_Pos		22	0 - 255	
19	SH_Base		273	0 - 4095	
20	NRG_Pos		40	0 - 127	
21	NRG_Width		50	0 - 255	
22	OSD_Pos		2	0 - 3	
23	OSD_Ptn		0	0 - 9	
24	GammaCtrl		1	0 - 1	R and B linked to G
25	REF_GatePos		3	0 - 1023	

Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
26	Ref_GateDur		182	0 - 1023	
27	R-BasePos		4	0 - 15	
28	G-BasePos		4	0 - 15	
29	B-BasePos		4	0 - 15	
30	RGB-Adjust		0	0 - 7	
31	RGB-AdjLv		0	0 - 4095	Max <-> Min Cyclick operation
32	LineR0		0	0 - 1023	Max <-> Min Cyclick operation
33	LineR1		0	0 - 1023	Max <-> Min Cyclick operation
34	LineR2		0	0 - 1023	Max <-> Min Cyclick operation
35	LineR3		0	0 - 1023	Max <-> Min Cyclick operation
36	LineR4		0	0 - 1023	Max <-> Min Cyclick operation
37	LineG0		0	0 - 1023	Max <-> Min Cyclick operation
38	LineG1		0	0 - 1023	Max <-> Min Cyclick operation
39	LineG2		0	0 - 1023	Max <-> Min Cyclick operation
40	LineG3		0	0 - 1023	Max <-> Min Cyclick operation
41	LineG4		0	0 - 1023	Max <-> Min Cyclick operation
42	LineB0		0	0 - 1023	Max <-> Min Cyclick operation
43	LineB1		0	0 - 1023	Max <-> Min Cyclick operation
44	LineB2		0	0 - 1023	Max <-> Min Cyclick operation
45	LineB3		0	0 - 1023	Max <-> Min Cyclick operation
46	LineB4		0	0 - 1023	Max <-> Min Cyclick operation
47	GhostR-Pos		2	0 - 31	
48	GhostG-Pos		2	0 - 31	
49	GhostB-Pos		2	0 - 31	
50	GhostR-Cent		2	0 - 2047	
51	GhostR-Start		128	0 - 255	
52	GhostR-End		128	0 - 255	
53	GhostG-Cent		2	0 - 2047	
54	GhostG-Start		128	0 - 255	
55	GhostG-End		128	0 - 255	
56	GhostB-Cent		2	0 - 2047	
57	GhostB-Start		128	0 - 255	
58	GhostB-End		128	0 - 255	
59	BlockR1		2047	0 - 2047	Max <-> Min Cyclick operation
60	BlockG1		2047	0 - 2047	Max <-> Min Cyclick operation
61	BlockB1		2047	0 - 2047	Max <-> Min Cyclick operation
62	BlockR2		0	0 - 2047	Max <-> Min Cyclick operation
63	BlockG2		0	0 - 2047	Max <-> Min Cyclick operation
64	BlockB2		0	0 - 2047	Max <-> Min Cyclick operation
65	ReverceR		0	0 - 2047	Max <-> Min Cyclick operation
66	ReverceG		0	0 - 2047	Max <-> Min Cyclick operation
67	ReverceB		0	0 - 2047	Max <-> Min Cyclick operation
68	BackCrossR-Cent		0	0 - 2047	
69	BackCrossR-Start		128	0 - 255	
70	BackCrossR-End		128	0 - 255	
71	BackCrossG-Cent		0	0 - 2047	
72	BackCrossG-Start		128	0 - 255	
73	BackCrossG-End		128	0 - 255	
74	BackCrossB-Cent		0	0 - 2047	
75	BackCrossB-Start		128	0 - 255	
76	BackCrossB-End		128	0 - 255	
77	ColShdSelect		1	0 - 1	
78	R-Min		305	0 - 1023	
79	R-Mid2		445	0 - 1023	
80	R-Mid1		585	0 - 1023	
81	R-Max		685	0 - 1023	
82	G-Min		305	0 - 1023	
83	G-Mid2		445	0 - 1023	
84	G-Mid1		585	0 - 1023	
85	G-Max		685	0 - 1023	
86	B-Min		305	0 - 1023	
87	B-Mid2		445	0 - 1023	
88	B-Mid1		585	0 - 1023	
89	B-Max		685	0 - 1023	
90	H-OutPos		112	0 - 2047	
91	OutAreaLv		2048	0 - 4095	
92	FlickerAdj		0	0 / 2	* Panel frequency switch
93	FRC_Bit		3	0 - 3	
94	FrontCTalkR-Cent		0	0 - 2047	

Group/ Item	Item Name	Function	Initial	Range	Note
95	FrontCTalkR-Start		128	0 - 255	
96	FrontCTalkR-End		128	0 - 255	
97	FrontCTalkG-Cent		0	0 - 2047	
98	FrontCTalkG-Start		128	0 - 255	
99	FrontCTalkG-End		128	0 - 255	
100	FrontCTalkB-Cent		0	0 - 2047	
101	FrontCTalkB-Start		128	0 - 255	
102	FrontCTalkB-End		128	0 - 255	
103	R-DCOffset-NGain		0	0 - 2047	
104	R-DCOffset-N1		0	0 - 2047	
105	R-DCOffset-N2		0	0 - 2047	
106	R-DCOffset-N3		0	0 - 2047	
107	R-DCOffset-N4		0	0 - 2047	
108	R-DCOffset-N5		0	0 - 2047	
109	R-DCOffset-N6		0	0 - 2047	
110	R-DCOffset-N7		0	0 - 2047	
111	R-DCOffset-N8		0	0 - 2047	
112	R-DCOffset-N9		0	0 - 2047	
113	R-DCOffset-N10		0	0 - 2047	
114	R-DCOffset-N11		0	0 - 2047	
115	R-DCOffset-N12		0	0 - 2047	
116	G-DCOffset-NGain		0	0 - 2047	
117	G-DCOffset-N1		0	0 - 2047	
118	G-DCOffset-N2		0	0 - 2047	
119	G-DCOffset-N3		0	0 - 2047	
120	G-DCOffset-N4		0	0 - 2047	
121	G-DCOffset-N5		0	0 - 2047	
122	G-DCOffset-N6		0	0 - 2047	
123	G-DCOffset-N7		0	0 - 2047	
124	G-DCOffset-N8		0	0 - 2047	
125	G-DCOffset-N9		0	0 - 2047	
126	G-DCOffset-N10		0	0 - 2047	
127	G-DCOffset-N11		0	0 - 2047	
128	G-DCOffset-N12		0	0 - 2047	
129	B-DCOffset-NGain		0	0 - 2047	
130	B-DCOffset-N1		0	0 - 2047	
131	B-DCOffset-N2		0	0 - 2047	
132	B-DCOffset-N3		0	0 - 2047	
133	B-DCOffset-N4		0	0 - 2047	
134	B-DCOffset-N5		0	0 - 2047	
135	B-DCOffset-N6		0	0 - 2047	
136	B-DCOffset-N7		0	0 - 2047	
137	B-DCOffset-N8		0	0 - 2047	
138	B-DCOffset-N9		0	0 - 2047	
139	B-DCOffset-N10		0	0 - 2047	
140	B-DCOffset-N11		0	0 - 2047	
141	B-DCOffset-N12		0	0 - 2047	
142	R-DCOffset-PGain		0	0 - 2047	
143	R-DCOffset-P1		0	0 - 2047	
144	R-DCOffset-P2		0	0 - 2047	
145	R-DCOffset-P3		0	0 - 2047	
146	R-DCOffset-P4		0	0 - 2047	
147	R-DCOffset-P5		0	0 - 2047	
148	R-DCOffset-P6		0	0 - 2047	
149	R-DCOffset-P7		0	0 - 2047	
150	R-DCOffset-P8		0	0 - 2047	
151	R-DCOffset-P9		0	0 - 2047	
152	R-DCOffset-P10		0	0 - 2047	
153	R-DCOffset-P11		0	0 - 2047	
154	R-DCOffset-P12		0	0 - 2047	
155	G-DCOffset-PGain		0	0 - 2047	
156	G-DCOffset-P1		0	0 - 2047	
157	G-DCOffset-P2		0	0 - 2047	
158	G-DCOffset-P3		0	0 - 2047	
159	G-DCOffset-P4		0	0 - 2047	
160	G-DCOffset-P5		0	0 - 2047	
161	G-DCOffset-P6		0	0 - 2047	
162	G-DCOffset-P7		0	0 - 2047	
163	G-DCOffset-P8		0	0 - 2047	

Group/ Item	Item Name	Function	Initial	Range	Note
164	G-DCOffset-P9		0	0 - 2047	
165	G-DCOffset-P10		0	0 - 2047	
166	G-DCOffset-P11		0	0 - 2047	
167	G-DCOffset-P12		0	0 - 2047	
168	B-DCOffset-PGain		0	0 - 2047	
169	B-DCOffset-P1		0	0 - 2047	
170	B-DCOffset-P2		0	0 - 2047	
171	B-DCOffset-P3		0	0 - 2047	
172	B-DCOffset-P4		0	0 - 2047	
173	B-DCOffset-P5		0	0 - 2047	
174	B-DCOffset-P6		0	0 - 2047	
175	B-DCOffset-P7		0	0 - 2047	
176	B-DCOffset-P8		0	0 - 2047	
177	B-DCOffset-P9		0	0 - 2047	
178	B-DCOffset-P10		0	0 - 2047	
179	B-DCOffset-P11		0	0 - 2047	
180	B-DCOffset-P12		0	0 - 2047	
181	ENBX-R		0	0 - 127	
182	ENBX-G		0	0 - 127	
183	ENBX-B		0	0 - 127	
184	DXOutPos		0	0 - 1	
185	R_V_INPUT_STEP_0		18	0 - 1023	
186	R_V_INPUT_STEP_512		16	0 - 1023	
187	R_V_INPUT_STEP_1024		11	0 - 1023	
188	R_V_INPUT_STEP_1536		7	0 - 1023	
189	R_V_INPUT_STEP_2048		3	0 - 1023	
190	R_V_INPUT_STEP_2560		1022	0 - 1023	
191	R_V_INPUT_STEP_3072		1020	0 - 1023	
192	R_V_INPUT_STEP_3584		1018	0 - 1023	
193	R_V_INPUT_STEP_4096		1018	0 - 1023	
194	G_V_INPUT_STEP_0		18	0 - 1023	
195	G_V_INPUT_STEP_512		16	0 - 1023	
196	G_V_INPUT_STEP_1024		11	0 - 1023	
197	G_V_INPUT_STEP_1536		7	0 - 1023	
198	G_V_INPUT_STEP_2048		3	0 - 1023	
199	G_V_INPUT_STEP_2560		1022	0 - 1023	
200	G_V_INPUT_STEP_3072		1020	0 - 1023	
201	G_V_INPUT_STEP_3584		1018	0 - 1023	
202	G_V_INPUT_STEP_4096		1018	0 - 1023	
203	B_V_INPUT_STEP_0		18	0 - 1023	
204	B_V_INPUT_STEP_512		16	0 - 1023	
205	B_V_INPUT_STEP_1024		11	0 - 1023	
206	B_V_INPUT_STEP_1536		7	0 - 1023	
207	B_V_INPUT_STEP_2048		3	0 - 1023	
208	B_V_INPUT_STEP_2560		1022	0 - 1023	
209	B_V_INPUT_STEP_3072		1020	0 - 1023	
210	B_V_INPUT_STEP_3584		1018	0 - 1023	
211	B_V_INPUT_STEP_4096		1018	0 - 1023	
212	FRPPOL		84	0 - 4095	
213	FRP_POS		28	0 - 255	
214	SAP		576	0 - 2047	
215	PRE_COLSHD_SEL		0	0 - 255	
216	HSYNC_FOLLOW		1	0 - 1	
217	DELAY_HSYNC		0	0 - 2047	
218	DELAY_VSYNC		8	0 - 255	
219	VSYNC_FLOW		0	0 - 1	
220	BLANK_RCENTER		0	0 - 2047	
221	BLANK_RSTART		128	0 - 255	
222	BLANK_REND		128	0 - 255	
223	BLANK_GCENTER		0	0 - 2047	
224	BLANK_GSTART		128	0 - 255	
225	BLANK_GEND		128	0 - 255	
226	BLANK_BCENTER		0	0 - 2047	
227	BLANK_BSTART		128	0 - 255	
228	BLANK_BEND		128	0 - 255	
229	Output_Limit_R		3359/4092/3359/3359/3359	0 - 4095	
230	Output_Limit_G		3359/4092/3359/3359/3359	0 - 4095	
231	Output_Limit_B		3359/4092/3359/3359/3359	0 - 4095	
232	CROSSTALK_COEF_R		1023	0 - 1023	

Group/ Item	Item Name	Function	Initial	Range	Note
233	CROSSTALK_COEF_G		1023	0 - 1023	
234	CROSSTALK_COEF_B		1023	0 - 1023	
235	LCOM_ENABLE		0	0 - 1	
236	ENBY_L1		35	0 - 255	
237	ENBY_H1		820	0 - 1023	
238	ENBY_L2		35	0 - 255	
239	ENBY_H2		820	0 - 1023	
Group 101	**Panel Service (6170/62334)**				
0	R-LCOM		145	0 - 255	* Video center adjustment R
1	G-LCOM		145	0 - 255	* Video center adjustment G
2	B-LCOM		145	0 - 255	* Video center adjustment B
3	R-ENBX-PW		4	0 - 15	
4	G-ENBX-PW		4	0 - 15	
5	B-ENBX-PW		4	0 - 15	
6	R-DXIN		44	0 - 127	
7	G-DXIN		44	0 - 127	
8	B-DXIN		44	0 - 127	
9	R-ENBX1IN		24	0 - 31	
10	G-ENBX1IN		24	0 - 31	
11	B-ENBX1IN		24	0 - 31	
12	Vmid		--	0 - 255	
13	R-Ref		--	0 - 255	
14	G-Ref		--	0 - 255	
15	G-rRef		--	0 - 255	
16	Vref		170		
Group 200	**Option**				
0	Logo Prohibition (Forced No Brand)	Logo Prohibition (0: Menu, 1: Forced, 2: China, 3-9: not used)	0	0 - 2	Effective after AC On
1	RS232C Baudrate	Baud Rate	0	0 - 2	0: 19200bps, 1: 9600bps, 2: 115200bps
4	CABLE SW	Long Cable	0	0 - 10	0: Disable, 1: Enable
5	PW Debug Command Enable		0	0 - 1	0:Disable (Serial Command Eanble) 1: Enable (PW Debug Mode)
6	Device Refresh Disable		0	0 - 1	0:Enable, 1:Disable No last memory
7	Device Access Disable		0	0 - 1	0:Enable (Normal), 1:Disable No last memory
21	Lamp Warning Time (NORMAL)	Lamp Life at Normal Mode (Warning Time at Normal)		500 - 8000	
22	Lamp Warning Time (ECO)	Lamp Life at Eco Mode (Warning Time at Eco)		500 - 8000	
23	Lamp Warning Time (HIGH)	Lamp Life at High Mode (Warning Time at High)		500 - 8000	
30	Lamp life test enable				0:Disable 1:Enable, for safety test only
31	Lmap On time(for life test)	For test purpose			
32	Lamp Off time(for life test)	For test purpose			
33	Lamp total time(for life test)	For test purpose			
40	Lamp PWM PresAv 50Hz		80	0 - 255	
41	Lamp PWM PresAv 60Hz		67	0 - 255	
42	Lamp PWM PresUnlock		67 -> 65	0 - 255	
43	Lamp PWM PresPcA		2	0 - 255	
44	lamp PWM PresPcB		3	0 - 255	
45	Lamp PWM PrefHAb 50Hz		5000	0 - 65535	
46	Lamp PWM PrefHAv60Hz		5000	0 - 65535	
47	Lamp PWM PrefHUnlock		5000	0 - 65535	
50	Lamp Replacement Display	Switch Lamp Warning Display On/Off	1	0 - 1	
51	Filter Warning Diaplay	Switch Filter Warning Display On/Off	1	0 - 1	
52	Lamp Counter reset Times	Reset Times of Lamp Counter	0	0 - 255	Read only
53	Filter Counter reset Times	Reset Times of Filter Counter	0	0 - 255	Read only
54	Factory Default Execute Times	Reset times of Fanctory Default	0	0 - 255	Read only
55	Motor Disable	0: On, 1: Off	0	0 - 1	
56	Menu Position	Move menu (X asis)	0	0 - 1024	
57	Menu Position	Move menu (Y asis)	0	0 - 1024	
58	Lamp Go Out				
59	Source Search Enable	Enable Sorrce Search	0	0 - 1	
60	Language Default Setting		0	0 - 2	0: English (default) 1: Japanese, 2: Stand by Eco
65	Audio Mute Link	Video Mute Link	0	0 - 1	0: Link Off, 1: Link On (default)
70	P-RC Mode		0	0 - 1	0: P, 1: S
Group 201	**Option (signal)**				
0	FrameLock Option		1	0 - 1	0: FrameLockOFF at PC signal 1: FrameLockON at PC signal and 47Hz (Vfreq) ~ Panel frequency of input signal

Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
2	Field Sense Invert Enable		0	0 - 1	Reverse Processing of FLDINVSetting Value 0: Disable - Used FLDINV Setting Value 1: Enable - Used Reversed FLDINV Setting Value
4	Sub Image Enable		1	0 - 1	0:Disable (Service Adjustment Dsiable, Used all the Center Values 1:Enable (Service Adjustment Enable)
6	Zoom Accelerator Enable		0	0 - 1	0:Zoom Accelerator OFF, 1:Zoom Accelerator ON No last memory
7	DZoom Reset by Keystone		0	0 - 1	0:Enable (Normal), 1:Disable (Dzoo is not cancelled even if Keystone is cancelled) No last memory
8	Stability Count	Count Value of V-missing	5	0 - 255	
9	Sensivity for Signal Lost (HSYNC)	Only used this value for No Signal Judgement(Hz)	350	0 - 65535	
10	Sensivity for Signal Lost (VSYNC)	Only used this value for No Signal Judgement(Line)	3	0 - 255	
11	Keystone Filter Signal Center Value		16	0 -30	
Group 202	**Option (MCI)**				
0	Memory Viewer Please Wait OSD		1	0 - 1	
1	SIMPLE_CHANNEL_NUM		11	0 - 11	
Group 205	**Spread Spectrum**				
0	Ebanle	0: Off, 1: On	1	0 - 1	
1	Diviation Freq.		80	1 - 500	
2	Ratio		100	0 - 300	
Group 210	**LampContorl**				
0	DIMMER_CTRL_LEVEL1	Luminance Level 1 Data for Dimmer: Dim Level 1 at the less than the Value	7	0 - 255	
1	DIMMER_CTRL_LEVEL2	Luminance Level 2 Data for Dimmer: Dim Level 2 at the less than the Value	14	0 - 255	
2	DIMMER_CTRL_LEVEL3	Luminance Level 3 Data for Dimmer: Dim Level 3 at the less than the Value	21	0 - 255	
3	DIMMER_CTRL_LEVEL4	Luminance Level 4 Data for Dimmer: Dim Level 4 at the less than the Value	28	0 - 255	
4	DIMMER_CTRL_LEVEL5	Luminance Level 5 Data for Dimmer: Dim Level 5 at the less than the Value	35	0 - 255	
5	DIMMER_CTRL_LEVEL6	Luminance Level 6 Data for Dimmer: Dim Level 6 at the less than the Value	42	0 - 255	
6	DIMMER_CTRL_LEVEL7	Luminance Level 7 Data for Dimmer: Dim Level 7 at the less than the Value	49	0 - 255	
7	DIMMER_CTRL_LEVEL8	Luminance Level 8 Data for Dimmer: Dim Level 8 at the less than the Value	56	0 - 255	
8	DIMMER_CTRL_LEVEL9	Luminance Level 9 Data for Dimmer: Dim Level 9 at the less than the Value	63	0 - 255	
9	DIMMER_CTRL_LEVEL10	Luminance Level 10 Data for Dimmer: Dim Level 10 at the less than the Value	70	0 - 255	
10	DIMMER_CTRL_LEVEL11	Luminance Level 11 Data for Dimmer: Dim Level 11 at the less than the Value	77	0 - 255	
11	DIMMER_CTRL_LEVEL12	Luminance Level 12 Data for Dimmer: Dim Level 12 at the less than the Value	84	0 - 255	
12	DIMMER_CTRL_LEVEL13	Luminance Level 13 Data for Dimmer: Dim Level 13 at the less than the Value	91	0 - 255	
13	DIMMER_CTRL_LEVEL14	Luminance Level 14 Data for Dimmer: Dim Level 14 at the less than the Value	98	0 - 255	
14	DIMMER_CTRL_LEVEL15	Luminance Level 15 Data for Dimmer: Dim Level 15 at the less than the Value	105	0 - 255	
15	DIMMER_AVERAGE_POINT	Luminance Data Avarage Point for Mimmer	4	0 - 16	
16	DIMMER_AVERAGE_DATA	Luminance Data Avarage Value for Dimmer	-	-	* Read only
17	DIMMER_LEVEL_AUTO	Current Dimmer Leverl	-	-	* Read only
18	DIMMER_LEVEL_NORMAL	Normal Dimmer Level	15	0 - 15	
19	DIMMER_LEVEL_ECO	Eco Dimmer Level	0	0 - 15	
20	Panel Life Mode		0	0 - 1	
21	VOLTAGE_LEVEL	Lamp Voltage			Unit: 8bit(Raw Data) * Read only
22	DIMMER_LEVEL_HIGH	Dimmer Level at High	15	0 - 15	
23	Past Calculation System		-	-	
24	New APL System		-	-	
25	Red Avarage Level		-	-	
26	Green Average Level		-	-	
27	Blue Average Level		-	-	
28	SAT		-	-	
29	Chroma Coefficient		160	0 - 255	
30	cSatMin		53	0 - 255	
31	cSatMax		203	0 - 255	
32	wCoeMin		400	0 - 1000	

Electrical Adjustments

Group/ Item	Item Name	Function	Initial						Range	Note
33	wCoeMax		1000						0 - 100	
Group 230	VBI Slice Level									
0	Generic Initial Slice Level		9						0 - 255	
1	Generic High Level Threshold		0						0 - 255	
2	Generic Low Level Threshold		0						0 - 255	
3	Generic Minimum Low Level		0						0 - 255	
4	Generic Maximum High Level		255						0 - 255	
Group 250	FAN Voltage Adjutment									
0	Fan1 Min. Adjust (DAC)		28						0 - 255	
1	Fan1 Max. Adjustt(DAC)		205						0 - 255	
2	Fan2 Min. Adjust (DAC)		36						0 - 255	
3	Fan2 Max. Adjust (DAC)		207						0 - 255	
4	Fan3 Min. Adjust (DAC)		30						0 - 255	
5	Fan4 Max. Adjust (DAC)		235						0 - 255	
6	Not used									
7	Not used									
Group 252	Fan Option									
0	Hi-Land Switch	0: Normal 1: Hi-Land Mode "On1" 2: HiLand Mode "On2"							0 - 2	Read only
1	Safety Switch	For Safety Application purpose	0						0,3-6	
2	Fan Manual Switch	0: Auto, 1: Manual	0						0 - 3	
3	Fan1 Manual Voltage	Fan Voltage (x0.1V)	100						0 - 255	
4	Fan2 Manual Voltage	Fan2 Voltage (x0.1V)	100						0 - 255	
5	Fan3 Manual Voltage	Fan3 Voltage (x0.1V)	100						0 - 255	
6	Not used									
Group 253	FAN Error Setting									
			A	B	C	D	E	F	A: Normal (OFF) C: Hi-Land (ON1) E: Hi-Land (ON2)	B: Normal/Ceiling (OFF) D: Hi-Land/Ceiling(ON1) F: Hil-Land/Ceiling(ON2)
5	Temp A Warning (Normal)	Temperature A to judge the Temp. Failure Outside at Normal	43	43	0	0	40	40	30-100	
6	Temp B Warning (Normal)	Temperature B to judge the Temp. Failure Panel at Normal	52	52	0	0	52	52	30-100	
7	Temp C Warning (Normal)	Temperature C to judge the Temp. Failure Lamp at Normal	60	60	0	0	55	55	30-100	
8	Temp B-A Waninig (Normal)	Temperature B-A to judge the Temp. Failure Filter Cloggled at Normal	100	100	100	100	100	100	0-100	
9	Temp C-A Warning (Normal)	Temperature C-A to judge the Temp. Failure Filter Cloggled at Normal	100	100	100	100	100	100	0-100	
10	Temp A Warning (Eco)	Temperature A to judge the Temp. Failure Outside at Eco	42	42	0	0	40	40	30 - 100	
11	Temp B Warning (Eco)	Temperature B to judge the Temp. Failure Panel at Eco	54	54	0	0	50	50	0 - 100	
12	Temp C Warning (Eco)	Temperature C to judge the Temp. Failure Lamp at Eco	60	60	0	0	52	52	0 - 100	
13	Temp B-A Waninig (Eco)	Temperature B-A to judge the Temp. Failure Filter Cloggled at Eco	100	100	100	100	100	100	0 - 100	
14	Temp C-A Warning (Eco)	Temperature C-A to judge the Temp. Failure Filter Cloggled at Eco	100	100	100	100	100	100	0 - 100	
15	Temp A Warning Offset (Temp)		5						0 - 100	
16	Temp B Warning Offset (Temp)		5						0 - 100	
17	Temp B Warning Offset (Temp)		10						0 - 100	
18	Temp B-A Warning Offset (Temp)		0						0 - 100	
19	Temp C-A Warning Offset (Temp)		0						0 - 100	
20	Temp A Warining Offset (Time)		3						0 - 5	
21	Temp B Warning Offset (Time)		3						0 - 5	
22	Temp B Warning Offset (Time)		3						0 - 5	
23	Temp B-A Warning Offset (Time)		3						0 - 5	
24	Temp C-A Warning Offset (Time)		3						0 - 5	
Group 254	FAN Control Range Setting									
			A	B	C	D	E	F	A: Normal (OFF) C: Hi-Land (ON1 DIF) E: Hi-Land (ON2)	B: Normal/Ceiling (OFF) D: Hi-Land/Ceiling(ON1 DIF) F: Hil-Land/Ceiling(ON2
10	Normal Fan Control Min. Temp	Temp Sensor Control Start/End at Normal	35	35	0	0	32	32	20 - 100	
11	Normal Fan Control Max. Temp		40	40	0	0	38	38	20 - 100	
12	Normal Fan1 Min.	Fan Voltage at Normal (x0.1V)	65	65	-10	-10	125	125	0 - 255	
13	Normal Fan1 Max.		135	135	0	0	135	135	0 - 255	
14	Normal Fan2 Min.		65	65	-10	-10	90	90	0 - 255	
15	Normal Fan2 Max.		120	120	0	0	135	135	0 - 255	
16	Normal Fan3 Min.		77	77	-5	-5	80	80	0 - 255	
17	Normal Fan3 Max.		90	90	-5	-5	100	100	0 - 255	
18	Not used		9999						-	
19	Not used		9999						-	
20	Eco Fan Control Min. Temp	Fan Voltage at Eco (x0.1V)	36	36	0	0	32	32	20 - 100	

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Group/ Item	Item Name	Function	Initial	Range	Note
21	Eco Fan Control Max. Temp		39 39 0 0 38 38	20 - 100	
22	Eco Fan1 Min.		45 45 -10 -10 110 110	0 - 255	
23	Eco Fan1 Max.		120 120 0 0 120 120	0 - 255	
24	Eco Fan2 Min.		50 50 -10 -10 85 85	0 - 255	
25	Eco Fan2 Max.		100 100 0 0 100 100	0 - 255	
26	Eco Fan3 Min.		55 55 -5 -5 60 60	0 - 255	
27	Eco Fan3 Max.		65 65 -5 -5 80 80	0 - 255	
28	Not used		9999		
29	Not used		9999		
Group 255	**FAN Start/Cooling Setting**				
0	Fan1 Initial Volt	Fan Voltage at Startup (x0.1V)	50	0 - 255	
1	Fan2 Initial Volt		50	0 - 255	
2	Fan3 Initial Volt		50	0 - 255	
3	Not used		9999		
4	Fan1 Cooling Speed	Fan Voltage at Power Off (x0.1V)	45	0 - 255	
5	Fan2 Cooling Speed		60	0 - 255	
6	Fan3 Cooling Speed		135	0 - 255	
7	Not used		9999		
8	Cooling Time L1	Cooling Time at L1 (x 30 sec.)	1	1 - 15	
9	Cooling Time L2	Cooling Time at L2 (x 30 sec.)	3	1 - 15	
10	Temp Error Cooling Time	Cooling Time at Temp Error (x 30sec.)	3	1 - 15	
11	onStart Cooling Start Threshold	Cooling Start Threshold Temp at On Start	38	0 - 100	
12	After Shutdown Cooling	Cooling On/Off After Shutdown	1	0 - 1	
Group 256	**FAN Lamp Voltage Down Setting**				
0	Lamp Voltage	Current Lamp Voltage (x0.1V)	--	0 - 255	
1	Lamp Vol Threshold	Thereshold Voltage to judge the Low Lamp Voltage	0	30 - 90	
2	Fan1 Speed Gain	Fan Voltage Add Value at Min (x0.1V)	10	0 - 255	
3	Fan2 Speed Gain		10	0 - 255	
4	Fan3 Speed Gain		10	0 - 255	
5	Not used				
Group 257	**FAN Dimmer Setting**				
0	Dimmer Avarage Check Period	Avarage Time to Measurement 0: 10 sec, 1:30 sec, 2: 60 sec, 3: 90 sec.	1	0 - 10	
1	Dimmer Average	Average Dimmer			
2	Last Voltage Difference	Last Voltage Dfference (x0.1V)			
3	Voltage Difference Goal	Turget Voltage Difference (0.1V)			
Group 258	**Fan Option for Network Model**				
0	Standby Cooling Check Cycle	Temp A Check Period in Standby	5	-	
1	Cooling Threshold	Cooling Start Temp at Temp A	40	-	
2	Standby Cooling Enable	Cooling in Stanby Enable	1	0 - 1	
Group 260	**Auto Calibration (Commn) * Auto Calibration**				
0	Execute Calibration		0	0 - 1	Executes Auto-Calibration when changing the Value to 1 (PC White 100%)
1	Loop Count	Maximum Execution Times (OFFSET->GAIN)	10	1 - 30	
2	Auto Status	Result of Auto-Calibration (Last Memory)	0	0 / 1 / 9	0: OK, 1: Adjusting,2: Error * ReadOnly
3	AutoWait	Wait Value for each setting	1	1 - 20	
4	CHECK -Tolelance	Torelance of OFFSET	2	1 - 255	
Group 261	**Auto Calibration (RGB)**				
0	OFFSET AREA H START	Black Level Acquiring Area H-Start Position	975	0 - 1000	
1	OFFSET AREA V START	Black Level Acquiring Area V-Start Position	500	0 - 1000	
2	GAIN AREA H START	White Level Acquiring Area H-Start Position	25	0 - 1000	
3	GAIN AREA V START	White Level Acquiring Area V-Start Position	500	0 - 1000	
4	Image AREA H WIDTH	Black/White Level Acquiring Area	13	0 - 4095	
5	Image AREA V HIGHT	Black/White Level Acquiring Area Height	9	0 - 4095	
6	OFFSET target	Target Value of Black Level Adj.	3	0 - 127	
7	OFFSET torelance	Torelance of Black Level Adj.	1	1 - 127	
8	GAIN target	Target Value of White Level Adj.	238	0 - 255	
9	GAIN torelance	Torelance of White Level Adj.	1	1 - 255	
Group 262	**Auto Calibration (CVBS/SVIDEO)**				
0	Y Image Area Start X	Y Acquiring Area H-Start Position	50	0 - 1000	
1	Y Image Area Start Y	Y Acquiring Area V-Start Position	200	0 - 1000	
6	Image Area H Width	Image Level Acquiring Area	8	0 - 4095	
7	Image Area V Hight	Image Level Acquiring Area Height	9	0 - 4095	
8	Y Target Level	Target Value of Y Level Adj.	217	0 - 255	
11	Gain Tolerance	Torelance of Level Adj.	1	0 - 255	
12	Delta Gain	Deviation Width of Gain Value	9	0 - 255	
Group 264	**Auto Calibration (YCbCr)**				
0	Y-OFFSET AREA H START	Y - Offset Acquiring Area H-Start Position	925	0 - 1000	
1	Y-OFFSET AREA V START	Y - Offset Acquiring Area V-Start Position	500	0 - 1000	
2	CB - OFFSET AREA H START	CB - Offset Acquiring Area H-Start Position	925	0 - 1000	If not used: use Y's value
3	CB - OFFSET AREA V START	CB - Offset Acquiring Area V-Start Position	500	0 - 1000	If not used: use Y's value
4	CR - OFFSET AREA H START	CR - Offset Acquiring Area H-Start Position	925	0 - 1000	If not used: use Y's value

Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
5	CR - OFFSET AREA V START	CR - Offset Acquiring Area V-Start Position	500	0 - 1000	If not used: use Y's value
6	Y - GAIN AREA H START	Y	50	0 - 1000	
7	Y - GAIN AREA V START		500	0 - 1000	
8	CB - GAIN AREA H START		800	0 - 1000	
9	CB - GAIN AREA V START		500	0 - 1000	
10	CR - GAIN AREA H START		700	0 - 1000	
11	CR - GAIN AREA V START		500	0 - 1000	
12	Image AREA H WIDTH	YCBCR Level Acquiring Area	13	0 - 4095	
13	Image AREA V HIGHT	YCBCR Level Acquiring Area Height	9	0 - 4095	
14	Y - OFFSET TARTGET		4	0 - 255	
15	CB OFFSET TARGET		128	0 - 255	
16	CR OFFSET TARGET		128	0 - 255	
17	Y - GAIN TARGET		217	0 - 255	
18	CB - GAIN TARGET		237	0 - 255	
19	CR - GAIN TARGET		237	0 - 255	
20	OFFSET torelance	Torelance of OFFSET Adj.	1	1 - 255	
21	GAIN torelance	Torelance of GAIN Adj.	1	1 - 255	
Group 270	**Custom (Aspect)**				
0	Scaler Horizontal		100	68 - 132	
1	Scaler Vertical		100	68 - 132	
2	Connect	0: Individual / 1: Link Set	0	0 - 1	
3	Position Horizontal		100	85 - 115	
4	Position Vertical		100	85 - 115	
5	Aspect Enable		0	0 - 1	
Group 280	**AutoPC Adjsut**				
0	AutoPCAdjustEnable	Auto-PC Adj Operation Enable if Un-supported Signal Input	0	0 - 1	0: Enable, 1: Disable
1	Frequency Step	Frequency Steps of TotalDot	1	0 - 3	
2	Frequency Threshold	Total Dot Freqency Threshold	5	0 - 10	0 [] <--- -----> 10[Not matched]
3	Fine Phase	Do Phase Adj after Total Dot Adj.	1	0 - 1	0: Executes Fine Phase, 1: Not Execute
4	BLKDET	Black Level Detection Area	1	0 - 3	
5	PHASEMSK	Phase Detection Filter	0	0 - 3	0: Effective All Bit, 1: Disable Lower 1 bit 2: Disable Lower 2 bit, 3: Disable Lower 3 bit
Group 290	**PanelType * Panel Type Check**				
0	GammaL/R-View	Current Setting Check	0	0 - 20	0: Gamma for L-Type 20: Gamma for R-Type * Read only
1	GammaL/R-Change	Setting of Gamma	10	0 - 20	Sets L-Type Gamma if the Value is set to 0. Sets R-Type Gamma if the Value is set to 20.
Group 500	**Composite (NTSC) Composite / S-Video**				
0					
1	Disp Dots		668	0 ~ 4095	
2	H Back Porch		28	0 ~ 4095	
3	V Back Porch		18	0 ~ 4095	
4	Disp Line		458	0 ~ 4095	
Group 501	**Composite (PAL) Composite / S-Video**				
0					
1	Disp Dots		658	0 ~ 4095	
2	H Back Porch		33	0 ~ 4095	
3	V Back Porch		22	0 ~ 4095	
4	Disp Line		536	0 ~ 4095	
Group 502	**Composite (SECAM) Composite / S-Video**				
0					
1	Disp Dots		652	0 ~ 4095	
2	H Back Porch		28	0 ~ 4095	
3	V Back Porch		10	0 ~ 4095	
4	Disp Line		536	0 ~ 4095	
Group 510	**SCART(480i)**				
0					
1	Disp Dots		674	0 ~ 4095	
2	H Back Porch		132	0 ~ 4095	
3	V Back Porch		43	0 ~ 4095	
4	Disp Line		452	0 ~ 4095	
Group 511	**SCART (575i)**				
0					
1	Disp Dots		650	0 ~ 4095	
2	H Back Porch		152	0 ~ 4095	
3	V Back Porch		68	0 ~ 4095	
4	Disp Line		514	0 ~ 4095	
Group 520	**YCbCr (480i)**				
0	Total Dots		858	0 ~ 4095	

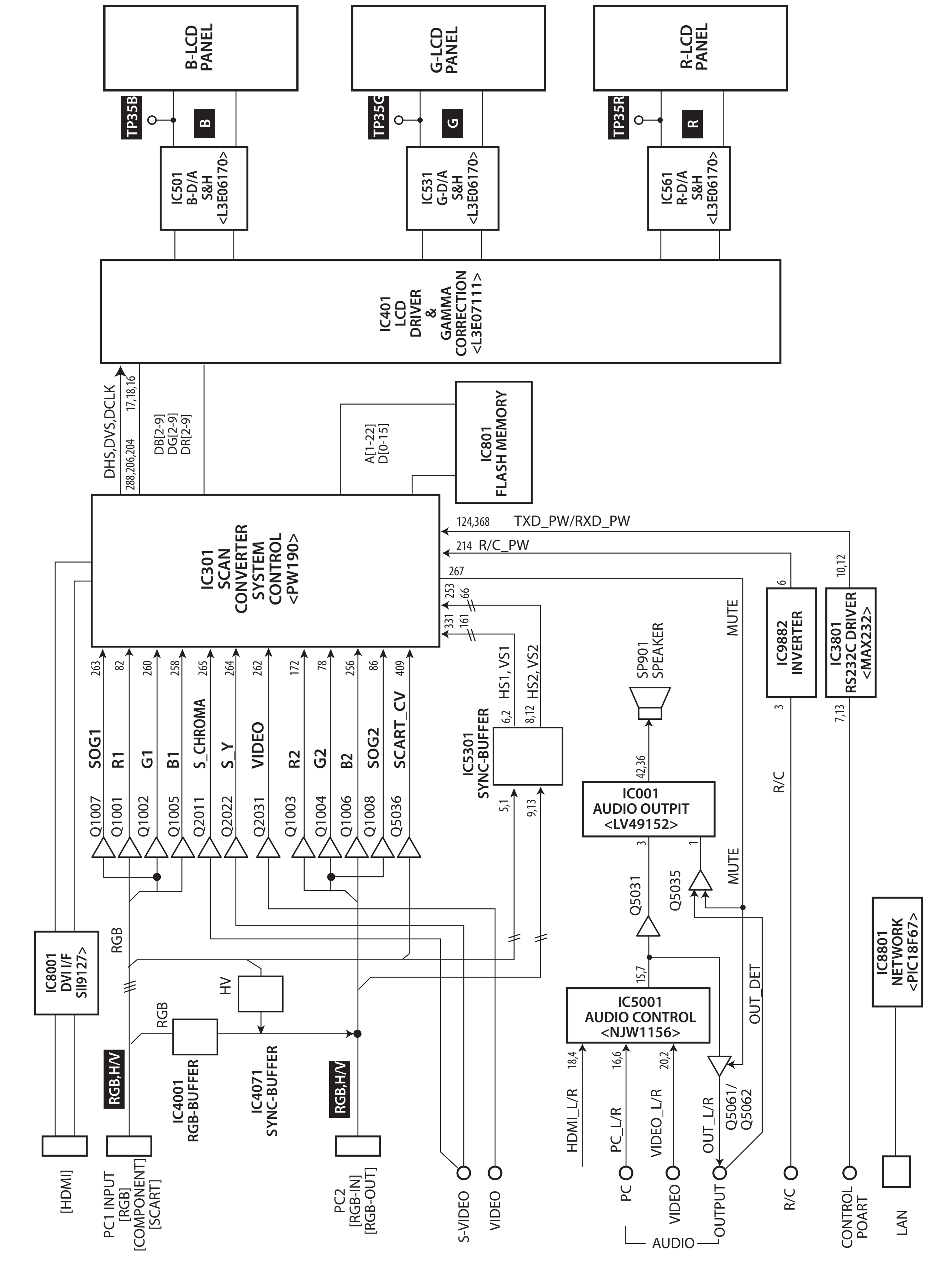
Group/ Item	Item Name	Function	Initial	Range	Note
1	Disp Dots		670	0 ~ 4095	
2	H Back Porch		146	0 ~ 4095	
3	V Back Porch		48	0 ~ 4095	
4	Disp Line		458	0 ~ 4095	
Group 521	**YCbCr (575i)**				
0	Total Dots		864	0 ~ 4095	
1	Disp Dots		656	0 ~ 4095	
2	H Back Porch		162	0 ~ 4095	
3	V Back Porch		64	0 ~ 4095	
4	Disp Line		534	0 ~ 4095	
Group 522	**YCbCr (480P)**				
0	Total Dots		858	0 ~ 4095	* Read only
1	Disp Dots		684	0 ~ 4095	
2	H Back Porch		136	0 ~ 4095	
3	V Back Porch		46	0 ~ 4095	
4	Disp Line		460	0 ~ 4095	
Group 523	**YCbCr (575P)**				
0	Total Dots		864	0 ~ 4095	* Read only
1	Disp Dots		690	0 ~ 4095	
2	H Back Porch		142	0 ~ 4095	
3	V Back Porch		56	0 ~ 4095	
4	Disp Line		550	0 ~ 4095	
Group 524	**YCbCr (720P - 60)**				
0	Total Dots		1650	0 ~ 4095	* Read only
1	Disp Dots		1248	0 ~ 4095	
2	H Back Porch		313	0 ~ 4095	
3	V Back Porch		34	0 ~ 4095	
4	Disp Line		700	0 ~ 4095	
Group 525	**YCbCr (720P - 50)**				
0	Total Dots		1980	0 ~ 4095	* Read only
1	Disp Dots		1248	0 ~ 4095	
2	H Back Porch		338	0 ~ 4095	
3	V Back Porch		36	0 ~ 4095	
4	Disp Line		700	0 ~ 4095	
Group 526	**YCbCr (1080i - 60)**				
0	Total Dots		2200	0 ~ 4095	* Read only
1	Disp Dots		1872	0 ~ 4095	
2	H Back Porch		256	0 ~ 4095	
3	V Back Porch		54	0 ~ 4095	
4	Disp Line		1052	0 ~ 4095	
Group 527	**YCbCr (1080i - 50)**				
0	Total Dots		2640	0 ~ 4095	* Read only
1	Disp Dots		1870	0 ~ 4095	
2	H Back Porch		257	0 ~ 4095	
3	V Back Porch		54	0 ~ 4095	
4	Disp Line		1052	0 ~ 4095	
Group 528	**YCbCr (1035i)**				
0	Total Dots		2200	0 ~ 4095	* Read only
1	Disp Dots		1872	0 ~ 4095	
2	H Back Porch		256	0 ~ 4095	
3	V Back Porch		92	0 ~ 4095	
4	Disp Line		1012	0 ~ 4095	
Group 540	**RGB Video (480i)**				
0	Total Dots		960	0 ~ 4095	
1	Disp Dots		752	0 ~ 4095	
2	H Back Porch		166	0 ~ 4095	
3	V Back Porch		48	0 ~ 4095	
4	Disp Line		460	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 541	**RGB Video (575i)**				
0	Total Dots		966	0 ~ 4095	
1	Disp Dots		736	0 ~ 4095	
2	H Back Porch		182	0 ~ 4095	
3	V Back Porch		66	0 ~ 4095	
4	Disp Line		536	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 542	**RGB Video (480P)**				

Group/ Item	Item Name	Function	Initial	Range	Note
0	Total Dots		960	0 ~ 4095	
1	Disp Dots		766	0 ~ 4095	
2	H Back Porch		156	0 ~ 4095	
3	V Back Porch		46	0 ~ 4095	
4	Disp Line		460	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 543	**RGB Video (575P)**				
0	Total Dots		986	0 ~ 4095	
1	Disp Dots		774	0 ~ 4095	
2	H Back Porch		174	0 ~ 4095	
3	V Back Porch		62	0 ~ 4095	
4	Disp Line		540	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 544	**RGB Video (720P - 60)**				
0	Total Dots		1650	0 ~ 4095	
1	Disp Dots		1248	0 ~ 4095	
2	H Back Porch		318	0 ~ 4095	
3	V Back Porch		36	0 ~ 4095	
4	Disp Line		698	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 545	**RGB Video (720P - 50)**				
0	Total Dots		1980	0 ~ 4095	
1	Disp Dots		1246	0 ~ 4095	
2	H Back Porch		310	0 ~ 4095	
3	V Back Porch		34	0 ~ 4095	
4	Disp Line		702	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 546	**RGB Video (1080i - 60)**				
0	Total Dots		2200	0 ~ 4095	
1	Disp Dots		1872	0 ~ 4095	
2	H Back Porch		260	0 ~ 4095	
3	V Back Porch		58	0 ~ 4095	
4	Disp Line		1046	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 547	**RGB Video (1080i - 50)**				
0	Total Dots		2640	0 ~ 4095	
1	Disp Dots		1872	0 ~ 4095	
2	H Back Porch		260	0 ~ 4095	
3	V Back Porch		56	0 ~ 4095	
4	Disp Line		1050	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 548	**RGB Video (1035i)**				
0	Total Dots		2200	0 ~ 4095	
1	Disp Dots		1872	0 ~ 4095	
2	H Back Porch		260	0 ~ 4095	
3	V Back Porch		92	0 ~ 4095	
4	Disp Line		1008	0 ~ 4095	
Group 560	**HDCP (480P)**				
7	Over Scan		0	0 - 255	
8	VSBEG		2	0 - 15	
Group 561	**HDCP (575P)**				
7	Over Scan		0	0 - 255	
8	VSBEG		2	0 - 15	
Group 562	**HDCP (720P-60)**				
7	Over Scan		0	0 - 255	
8	VSBEG		2	0 - 15	
Group 563	**HDCP (720P-50)**				
7	Over Scan		0	0 - 255	
8	VSBEG		2	0 - 15	
Group 564	**HDCP (1080i-60)**				
7	Over Scan		0	0 - 255	
8	VSBEG		2	0 - 15	
Group 565	**HDCP (1080i-50)**				

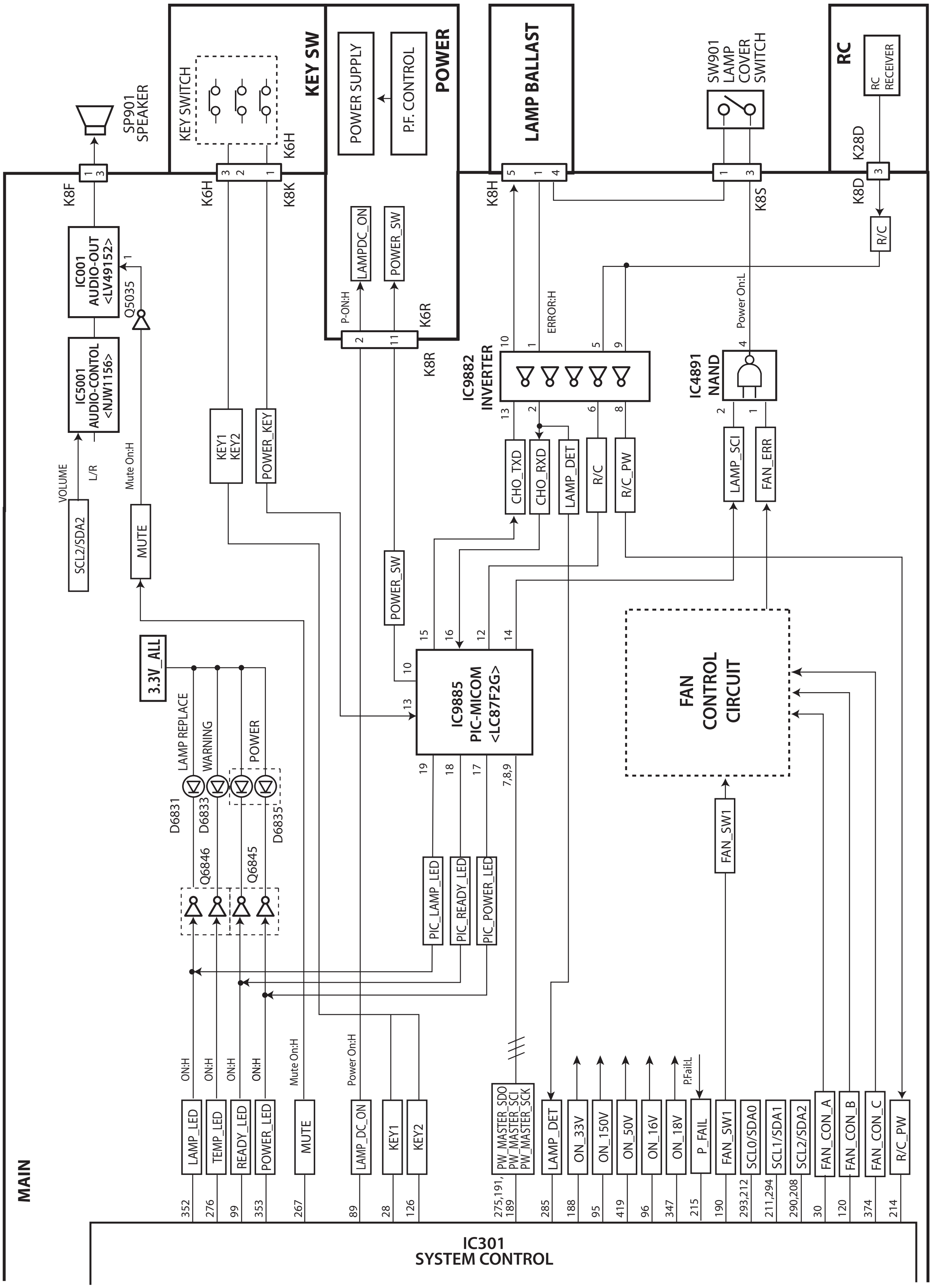
Group/ Item	Item Name	Function	Initial	Range	Note
7	Over Scan		0	0 - 255	
8	VSBEG		2	0 - 15	
Group 566	**HDCP (1035i-60)**				
7	Over Scan		0	0 - 255	
8	VSBEG		2	0 - 15	
Group 981	**Color Shading Correction Ofset Value L/R**				
0	R-Max		0 / 0	0 - 255	
1	R-Mid1		0 / 0	0 - 255	
2	R-Mid2		0 / 0	0 - 255	
3	R-Min		0 / 0	0 - 255	
4	G-Max		0 / 0	0 - 255	
5	G-Mid1		0 / 0	0 - 255	
6	G-Mid2		0 / 0	0 - 255	
7	G-Min		0 / 0	0 - 255	
8	B-Max		0 / 0	0 - 255	
9	B-Mid1		0 / 0	0 - 255	
10	B-Mid2		0 / 0	0 - 255	
11	B-Min		0 / 0	0 - 255	

Chassis Block Diagrams

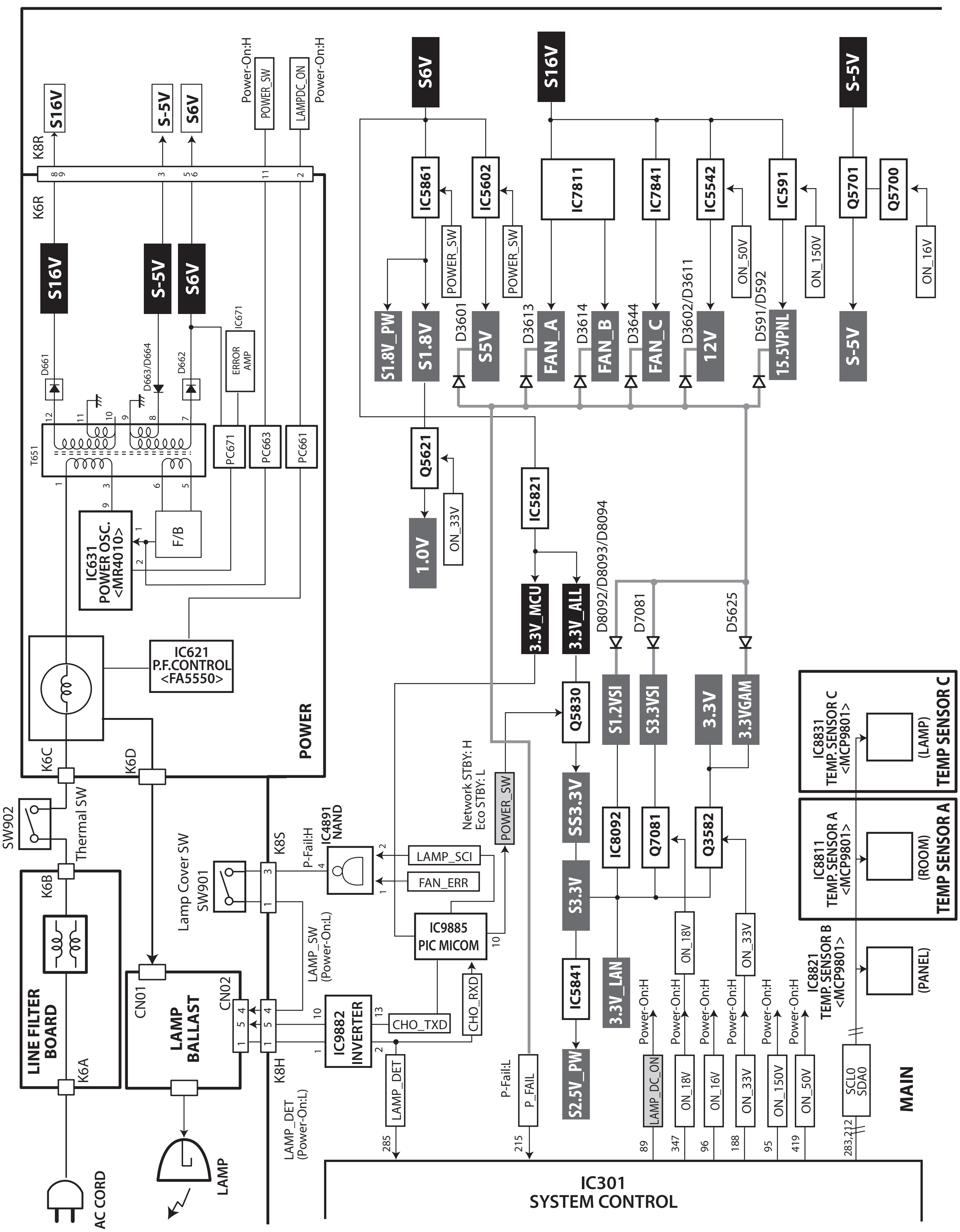
Chassis over view



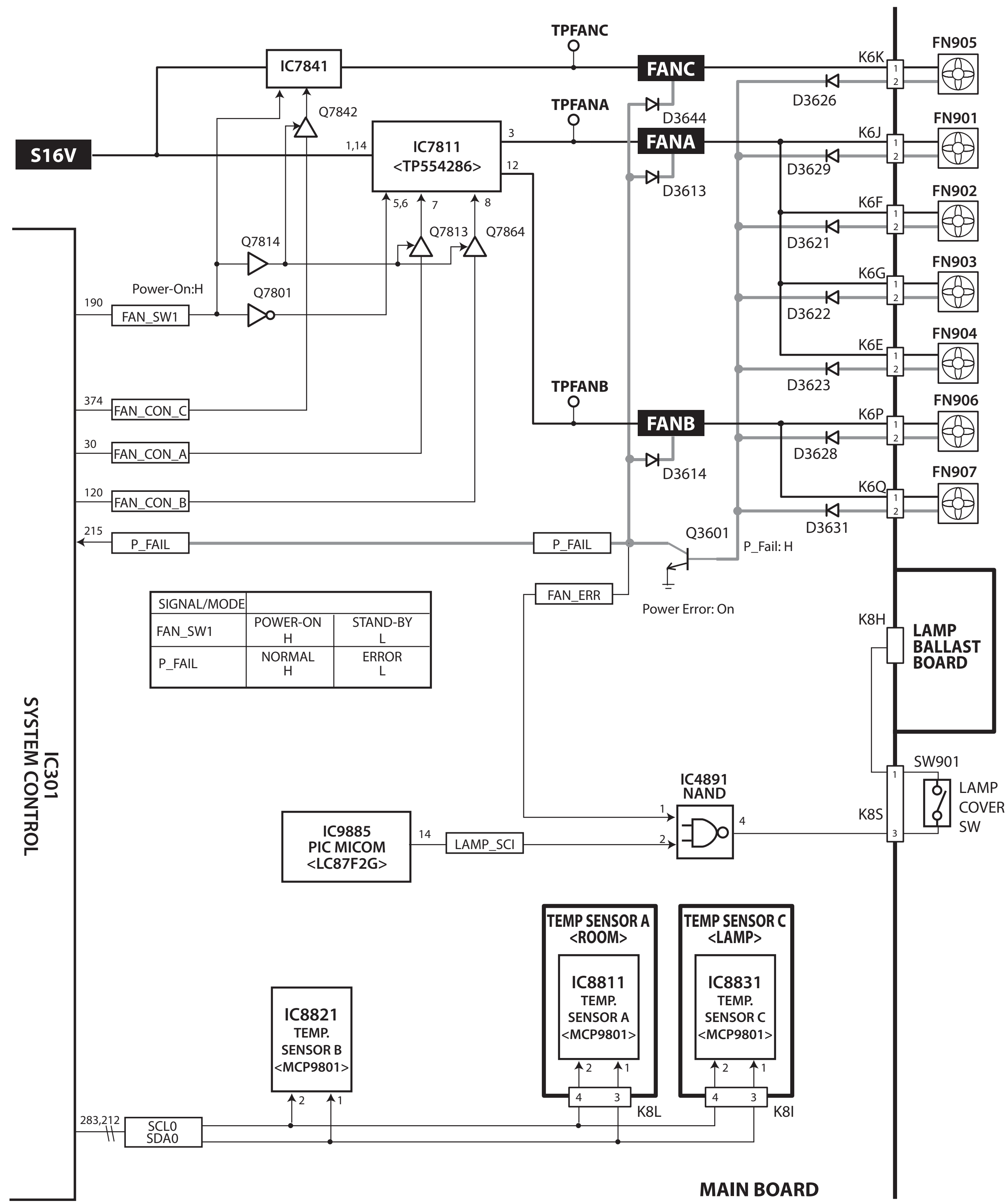
System control



Power supply & protection circuit



Fan control circuit



SIGNAL/MODE		
FAN_SW1	POWER-ON H	STAND-BY L
P_FAIL	NORMAL H	ERROR L

Indicators and Projector Condition

Check the indicators for projector condition.

Indicators			Projector Condition
POWER red/green	WARNING red	LAMP RE-PLACE yellow	
off	off	off	The projector is off. (The AC power cord is unplugged.)
red	off	*	The projector is in stand-by mode. Press the ON/STAND-BY button to turn on the projector.
green	off	*	The projector is operating normally.
blinks red	off	*	The projector is preparing for stand-by or the projection lamp is being cooled down. The projector cannot be turned on until cooling is completed and the POWER indicator stops blinking.
blinks green	off	*	The projector is in the Power management mode.
blinks red	blinks red	*	The temperature inside the projector is abnormally high. The projector cannot be turned on. When the projector is cooled down enough and the temperature returns to normal, the POWER indicator stops blinking and the projector can be turned on. (The WARNING indicator keeps blinking.)
red	blinks red	*	The projector has been cooled down enough and the temperature returns to normal. When turning on the projector, the WARNING indicator stops blinking.
off	red	*	The projector detects an abnormal condition and cannot be turned on. Unplug the AC power cord and plug it again to turn on the projector. If the projector is turned off again, unplug the AC power cord and contact the dealer or the service center for service and checkup. Do not leave the projector on. It may cause an electric shock or a fire hazard.

○ • • • green.　　(hatched) • • • red　　● • • • off

(blinking ○) • • • blinks green.　　(blinking hatched) • • • blinks red.

* When the life of the projection lamp draws to an end, the LAMP REPLACE indicator lights yellow. When this indicator lights yellow, replace the projection lamp with a new one promptly. Reset the lamp replacement counter after replacement of the lamp.

No Power

This projector provides a function which can be specified a defective area simply by indicating the LEDs. Connect the AC cord and press the Power button once and then check the LED indication.

- **When all of LED indicators are not lighting**, the symptom indicates that the primary power supply circuit does not operate properly. Check the power primary circuit and parts as follow;
  AC cord, F601 (Fuse), Power board,
  SW902 (Thermal sw.).............. short in normal
  SW902 opens when the surrounding temperature of the switch exceeds 85°C.

- **When the WARNING (red) and POWER (red) indicators are blinking**, the symptom indicates that the projector detected an abnormal temperature risen inside the projector. Check the air filters and remove the object near the intake and exhaust fan openings, and wait until the POWER indicator stops blinking, and then try to turn on the projector.
  The internal temperature is monitored by sensor ICs, IC8821 on the Main board and IC8811 on the Temp Sensor A board, IC8831 on the Temp Sensor C board.

- **When the WARNING indicator lights red**, the symptom indicates that the projector detected an abnormality in the cooling fan operation or in the power supply secondary circuits. Check fan operation and power supply lines, and the driving signal status.
  The P_FAIL signal (Error: L) is sent to pin 215 of IC301<SYSTEM CONTROL> when the abnormality occurred inside the projector, and then the IC301 sends the shutdown signal, LAMP_DC_ON, to the power supply circuit to stop its operation, and signal LAMP_SCI to the lamp ballast board via IC4891 and SW901<lamp cover switch> to stop operation of the lamp circuit.

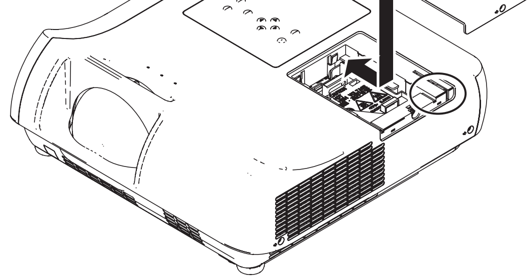
An abnormality occurs on the secondary power supply;
Check power supplies S16V, S6V, S-5V. P_FAIL signal becomes "Low" when the abnormality occurs on any of the power supply lines.

An abnormality occurs on the fan control circuit;
Check FN901, FN902, FN903, FN904, FN905, FN906, FN907 and peripheral circuit.
If any of the fans has an error, the fan lock signal drives Q3601 becomes "High". As the result, signal FAN_ERR becomes Low and is sent to lamp ballast board to stop lamp circuit.

An abnormality occurs on the drive signals;
ON_150V signal (Power-on: H) is output from pin 95 of IC301 and switches IC592,15.5VPNL supply circuit.
ON_33V signal (Power-on: H) is output from pin 188 of IC301 and switches IC5621, 1.0V and Q3582 3.3V supply circuit. ON_50V signal (Power-on:H) is output from pin 419 of IC301 and switches IC5542, 12V supply circuit.
ON_16V signal (Power-on:H) is output from pin 96 of IC301 and switches Q5701, S-5V supply circuit.
LAMP_DC_ON signal (Power-on: H) is output from pin 89 of IC301 and supplied to the P.F Control IC, IC621, on the power supply board through PC661.
LAMP_SCI signal (Power-on: H) is output from pin 14 of IC9885 and applied to pin 2 of IC4891 and out put pin 4 and then supplied to the lamp ballast board through SW901<Lamp Cover SW>.
LAMP_DET signal at the pin 285 of IC301 is applied from the lamp ballast unit. If the abnormality occurred on the lamp ballast unit, LAMP_DET signal becomes "High" and then IC301 shuts down the power supply circuit.

Lamp Cover switch

Make sure that the lamp cover is mounted correctly. If not or the lamp cover removed, the lamp does not light on for the safety. Check the lamp cover and lamp cover switch (SW901).



No Picture

Check following steps.

No picture with all of input sources

Yes → Check signal processing stage and LCD driving stage;
- Check RGB S&H signals at test points TP35B, TP35G, TP35R.
- Check power supply circuit 15.5VPNL and peripheral circuit.
- Check ICs IC501, IC531, IC561, IC401, IC301 and peripheral circuits.

No ↓

No picture with PC1 [Analog] input source only

Yes → Check IC4001 <Amplifier/Switch> and peripheral circuit.

No ↓

No picture with PC2 [Analog] input source only

Yes → Check IC301<Scaler> and peripheral circuit.

No ↓

No picture with all of computer input sources

Yes → Check PC/AV source selecting stage and processing stage;
- Check IC4701 and IC301<Scaler> and peripheral circuit.

No ↓

No picture with video input sources

→ Check AV source selecting and decoding stage;

S-Video source
- Check S-video signal (Y/C).
- S_CHROMA signal is applied to pin 265 of IC301<Scaler>, and S-Y signal is applied on pin 264 of IC301.

Composite video source
- Check composite video signal (Video).
- The composite video signal is applied to pins 262 of IC301 <Scaler>.

No Sound

Check following steps.

Check if the audio signal is observed at pins 7 and 15 of IC5001.

No →

Check IC5001 and peripheral circuit.
Check 12V power supply.

Yes ↓

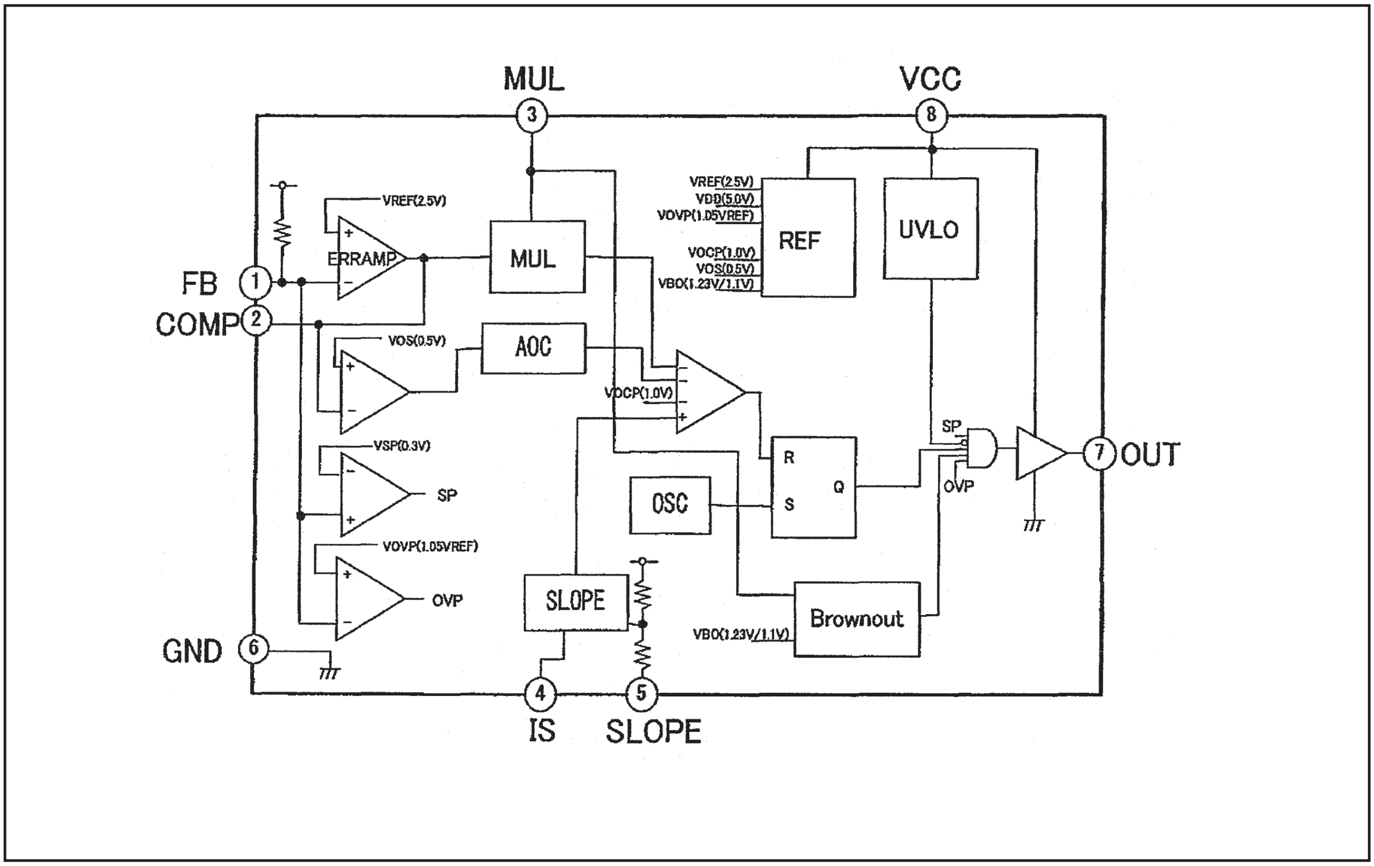
The Mute signal is output from pin 267 of IC 301<Scaler>. The OUT_DET signal is sent from Audio Out terminal.
Mute-On: H at pin 267 of IC301.
Check Audio Out Terminal and peripheral circuit

Scaler I/O Port Functions (PW190)

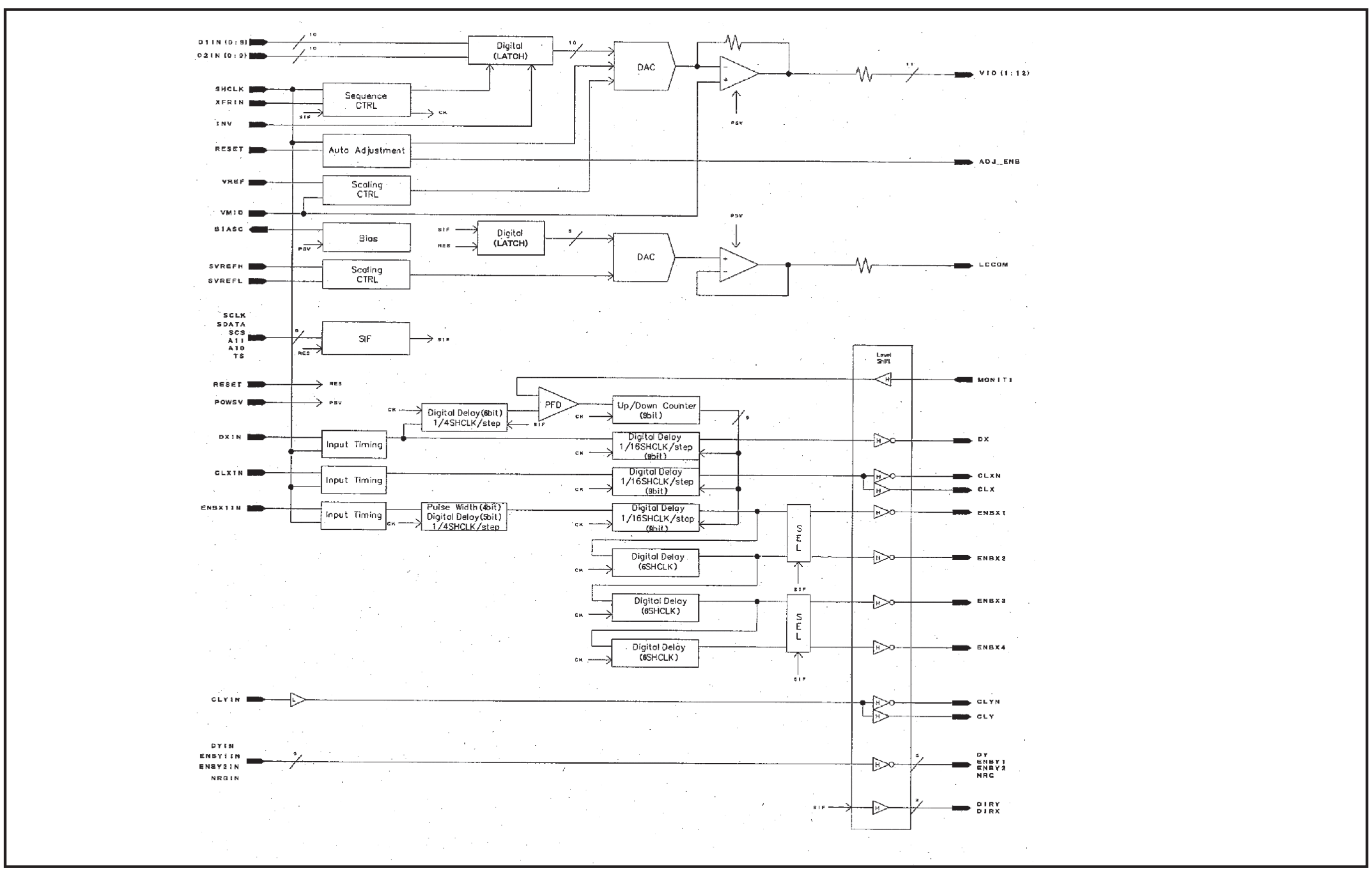
PIN NO.	PORT NO.	FUNCTION	SIGNAL NAME	DESCRIPTION	I/O
11	A11		PW_UPDATE		O
26	A26		RXD_MCI	Network RXD	I
101	B2		DDC_SW		O
124	B25		TXD_PW	Serial Control TXD	O
99	C1		READY_LED		O
200	C10		LAMP_PWM	Lamp Control	O
202	C12		SDATA_PW	3-Wired Serial Control Data	O
204	C14		DCLK	Clock Output	O
206	C16		DVS	V Sync Output	O
208	C18	2-Wire Serial Data 2	SDA2	IIC Bus Switch IC DAC, SoundIC[5V_SW]	O
211	C21	2-Wire Serial Clock 1	SCL1		O
212	C22	2-Wire Serial Data 0	SDA0	IIC Bus Temp Sensor [S3.3V]	O
214	C24	RC	R/C_PW	Remote Control Input	I
28	C26	ADC1	KEY1	Input/Select/Keystone	I
98	D1		FAN_SW2	Fan Control Switch SW2	O
191	D2		PW_MASTER_SCK		O
276	D3		TEMP_LED	LED on:H	O
284	D11		BLAST_AC	Ballast Control	O
285	D12		LAMP_DET	Lamp retry detect, High=Retry	I
288	D15		DHS	Horiz. Sync Output	O
290	D17	2-Wire Serial Clock 2	SCL2	IIC Bus Control Clock	O
293	D20	2-Wire Serial Clock 0	SCL0	IIC Bus Control Clock	O
294	D21	2-Wire Serial Data 1	SDA1	IIC Bus Control Data	O
295	D22		TXD_MCI	Network TXD	O
215	D24	ADC0	P_FAIL	Power Failure Signal Input, Failure:L	I
126	D25	ADC2	KEY-2	Key Control Input	I
190	E2		FAN_SW1	Fan Control Switch SW1	O
275	E3		PW_MASTER_SD0	Sub CPU Communication	O
352	E4		LAMP_LED	LED on:H	O
353	E5		POWER_LED	LED on:H	O
367	E19		SCLK_PW	3-Wired Serial Control Clock	O
368	E20		RXD_PW	Serial Control RXD	I
30	E26	DAC1	FAN CON_A	FAN CON_A	O
96	F1		ON_16V	Standby Power Control 16V, S-5V	O
189	F2		PW_MASTER_SDI	Sub CPU Communication	I
420	F5		POWER_SW_LAN	Network Power SW	O
298	F23	ADC4	Option SW	Option Switch	I
128	F25	DAC2	FAN CON_B	FAN CON_B	O
95	G1		ON_150V	Standby Power Control 15V	O
188	G2		ON_33V	Standby Power Control 3.3V	O
273	G3		IRM_RST	Color Shading Reset	O
419	G5		ON_50V	Standby Power Control 5V	O
373	H22		VREFG	Reference Voltage Output for SH	O
374	J22	DAC3	FAN_CON_C	FAN_CON_C	O
347	K4		ON_18V	Standby Power Control 18V	O
184	L2		POW_KEY	Power On Key, H:ON	I
90	M1		HDMI_DET	HDMI Connection Detection	I
89	N1		LAMP_DC_ON	Power Control, Power On: H	O
267	N3		MUTE	High=MUTE_ON	O
344	N4		MONIT_OUT	Low=in, High=Monit OUT	O
413	N5		MODEL_OPTION		O
474	N6		S_SW	S-Video Detection Input	I
265	R3		S_CHROMA	S-Video Chroma Input	I
86	T1		SOG2	Sync On Green Input 2	I
264	T3		S_Y	S-Video Y Input	I
263	U3		SOG1	Sync On Green Input 1	I
409	U5		SCART_CV	Y Input	I
262	V3		VIDEO	Video Input	I
82	Y1		R1	Red Input 1	I
260	Y3		G1	Green Input 1	I
174	AA2		G1	Sync Input 1	I
258	AB3		B1	Blue Input 1	I
172	AC2		R2	Red Input 2	I
331	AC7		HS1	Horiz Sync Input 1	I
78	AD1		G2	Green Input 2	I
256	AD3		B2	Blue Input 2	I
253	AD6		HS2	Horiz Sync Input 2	I
161	AE11		VS1	Vert. Sync Input 1	I
66	AF11		VS2	Vert. Sync Input 2	I

IC Block Diagrams

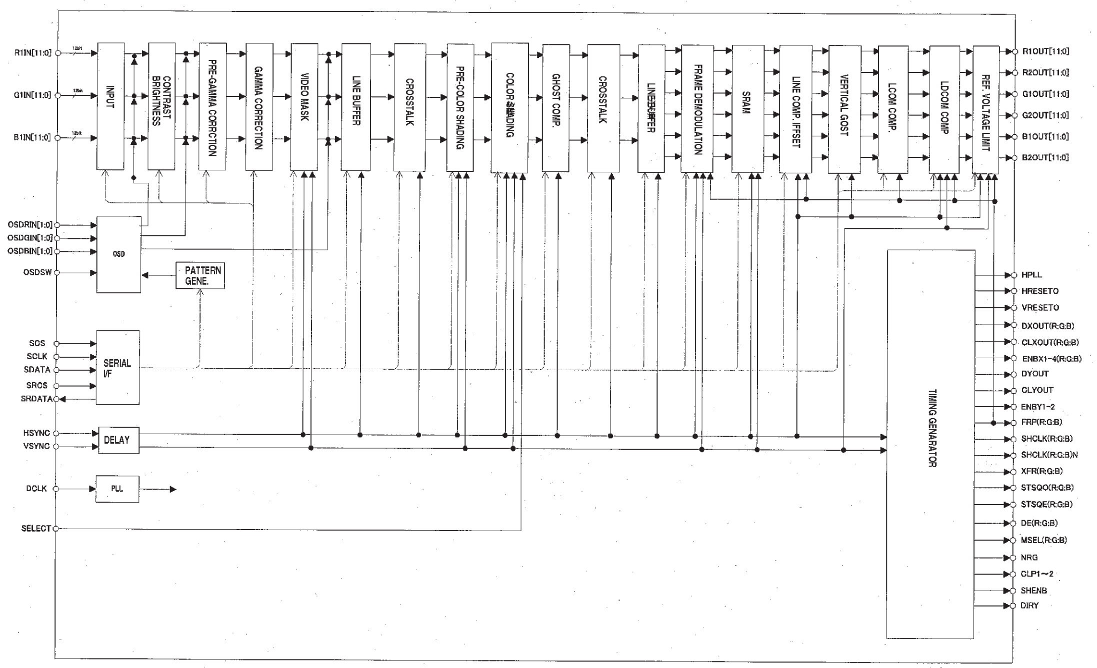
● FA5550NG <P.F. Control, IC621>



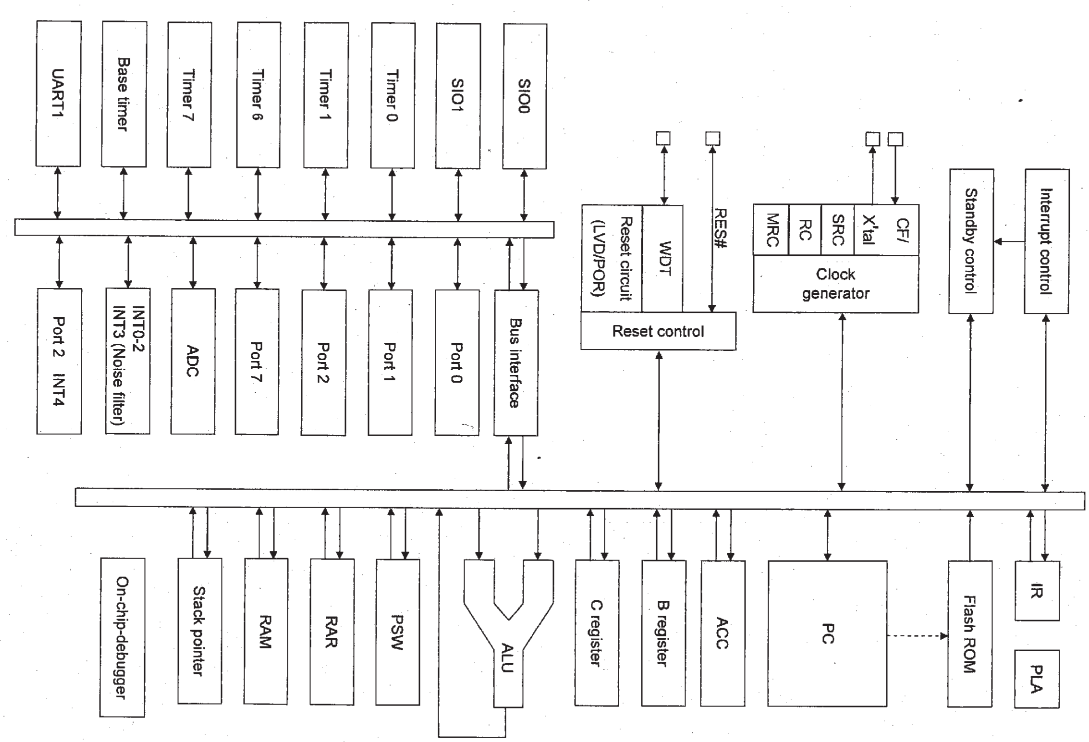
● L3E06170 <D/A, S/H-LCD Driver, IC501, IC531, IC561>



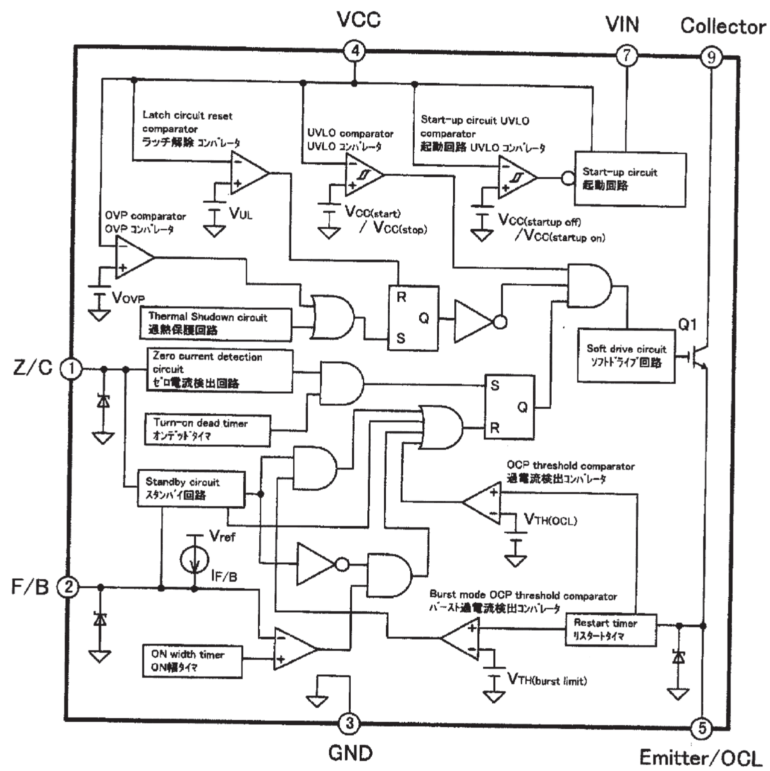
● L3E7111 <Digital Gamma and Driver, IC401>



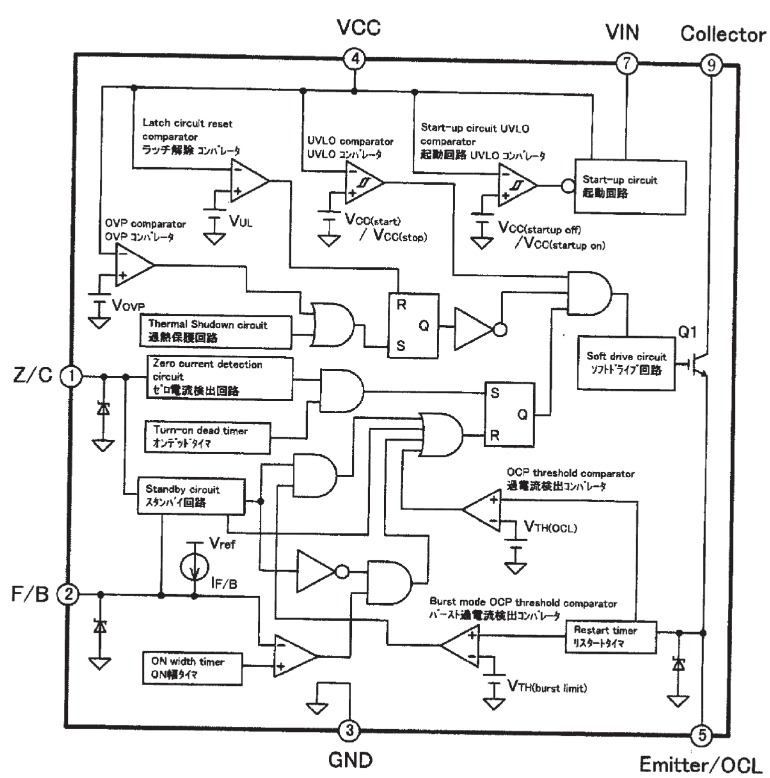
● LC87F2G08A5AN6 <PIC Micom, IC9885>



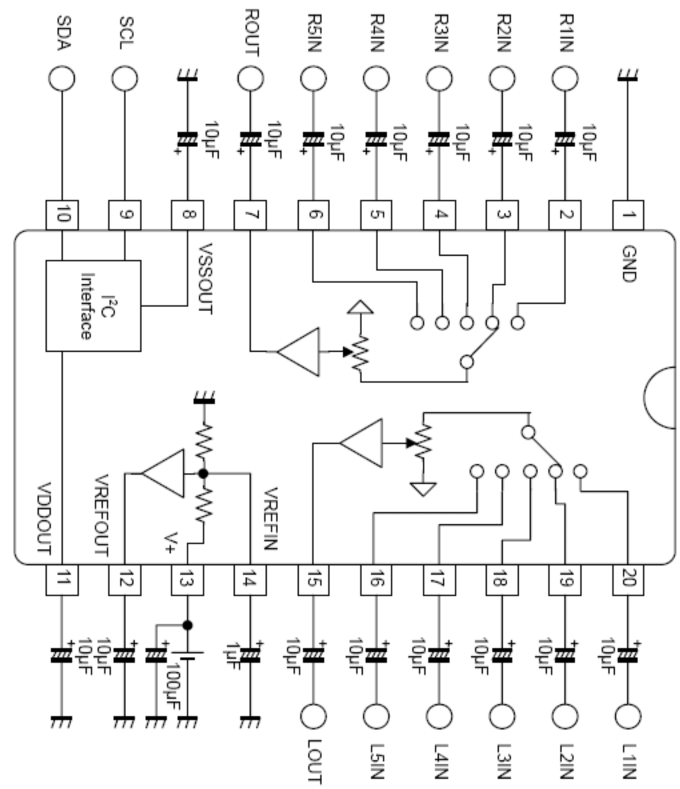
● LV49152V <Audio Output, IC001>



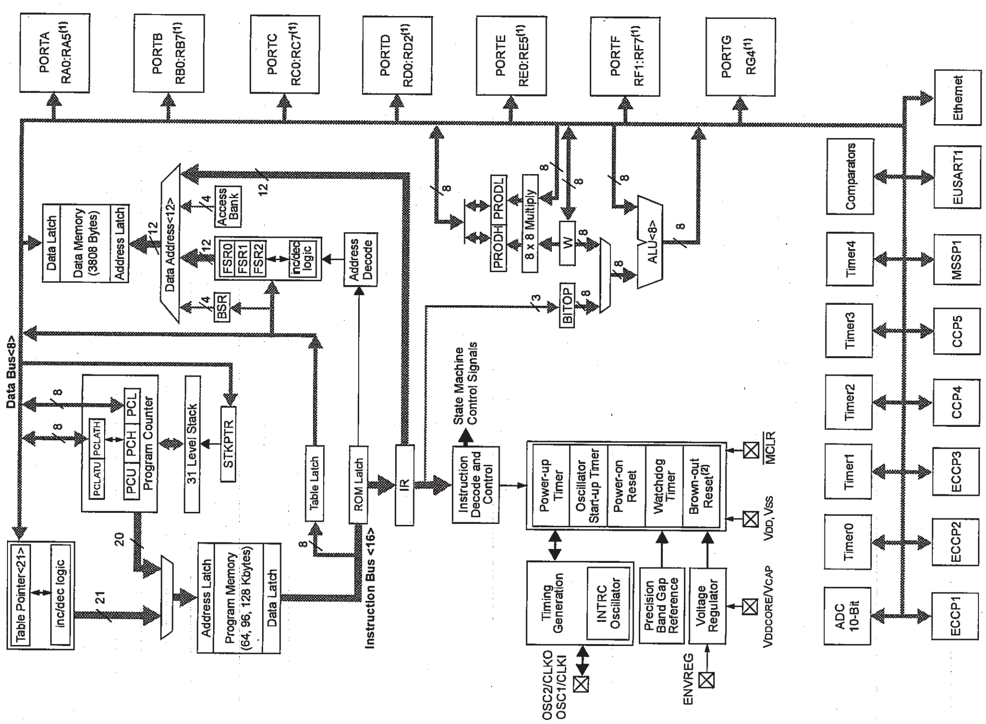
● MR4010 <Power Switching, IC631>



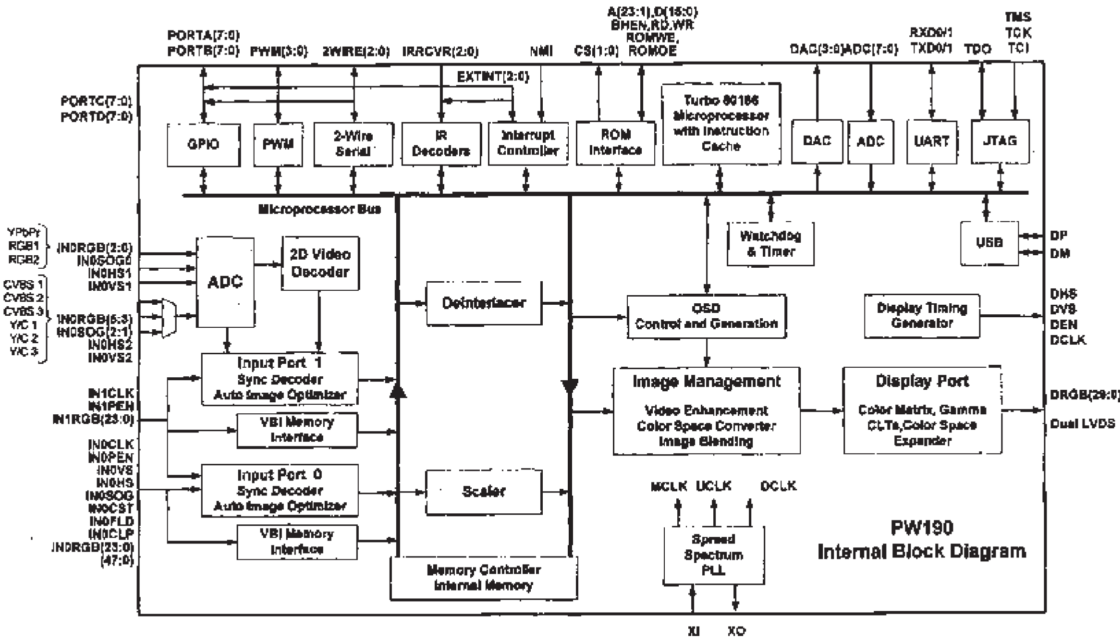
● NJW1156<Audio Selector,IC5001>



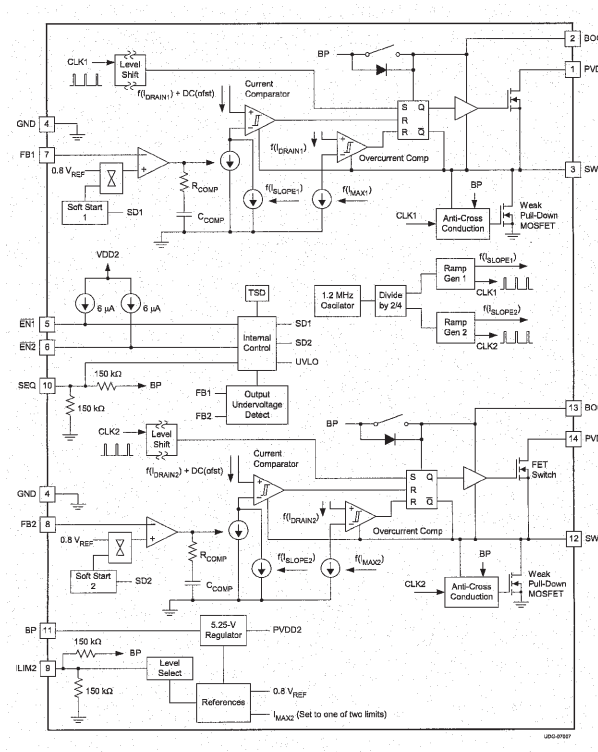
● PIC18F67J60<Network, IC8801>



● PW190 <Scaler, IC301>

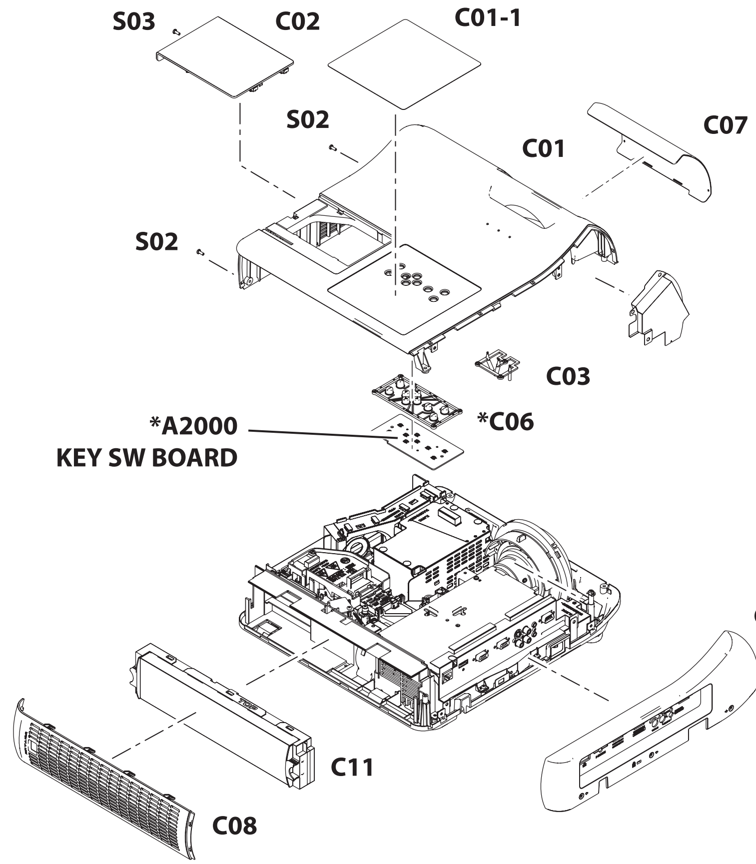


● TPS54286 <DC-DC Converter, IC7811>



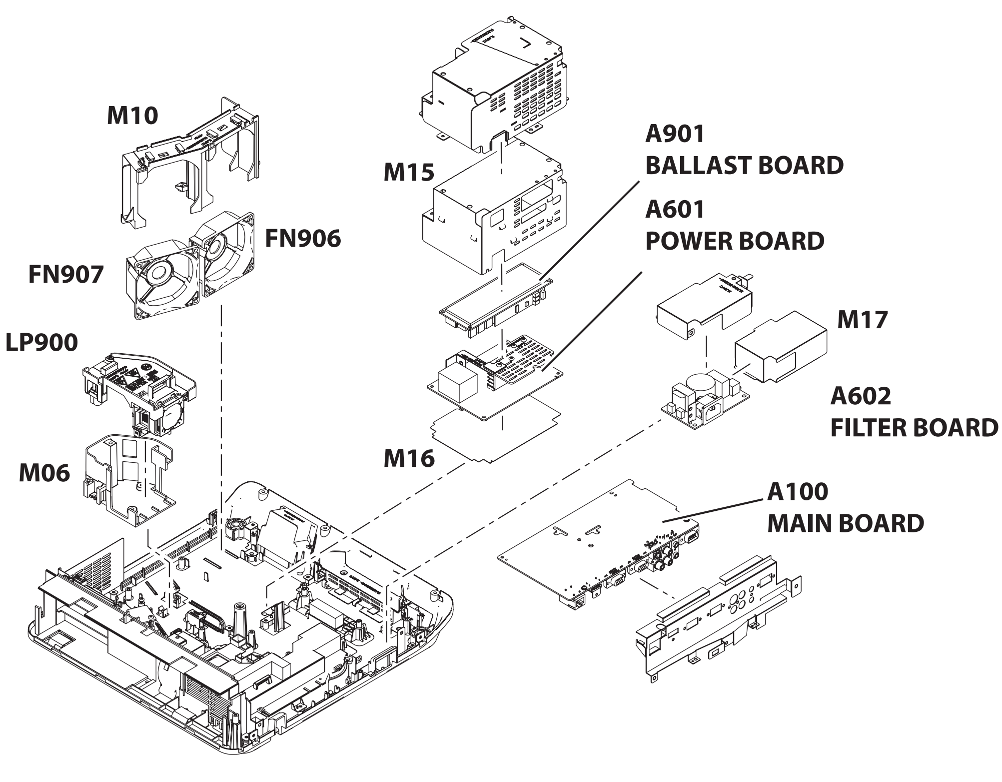
Parts Location Diagrams

Cabinet top assembly



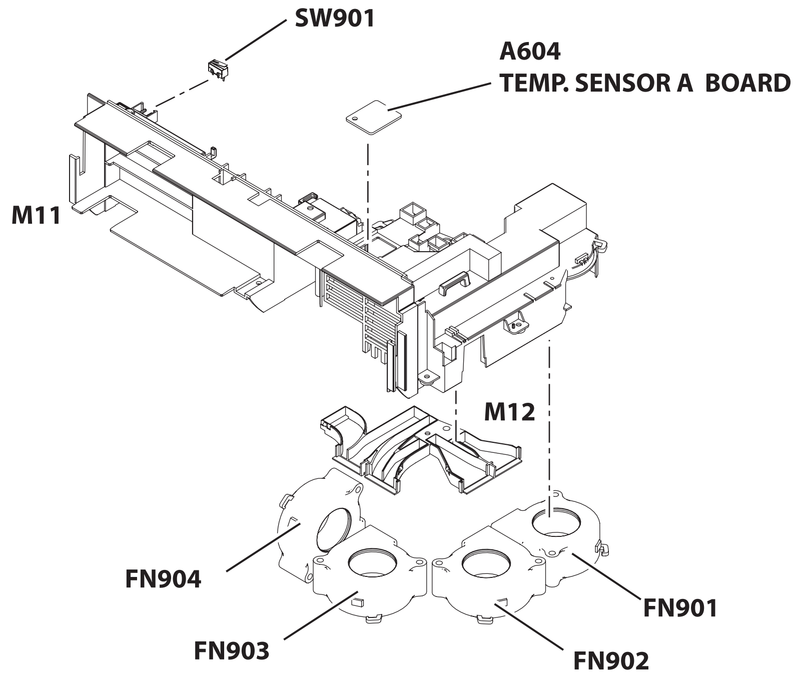
* Only model PLC-WL2500 has those parts.

Cabinet bottom-1 assembly

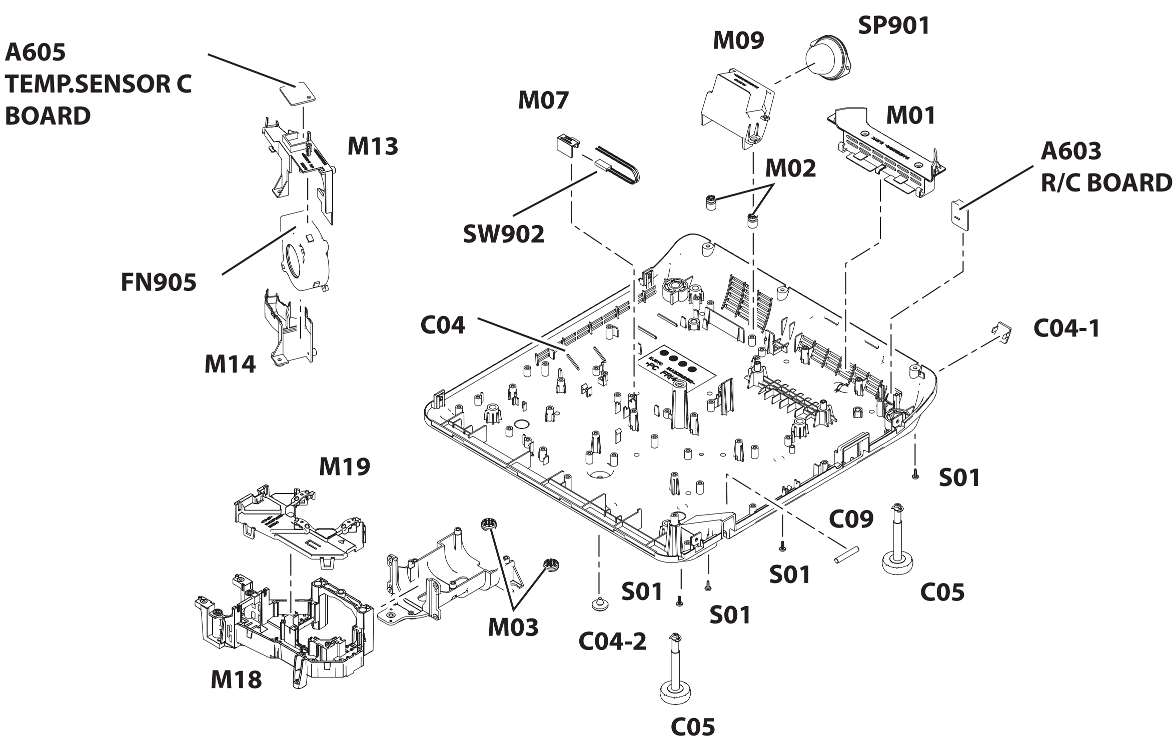


Parts Location Diagrams

Filter duct assembly

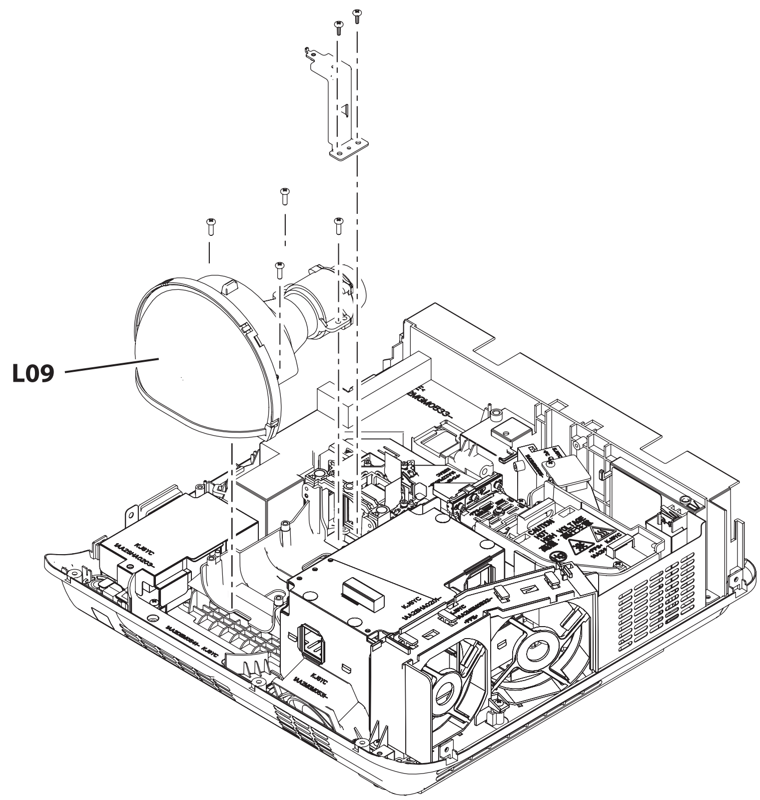


Cabinet bottom-2 assembly

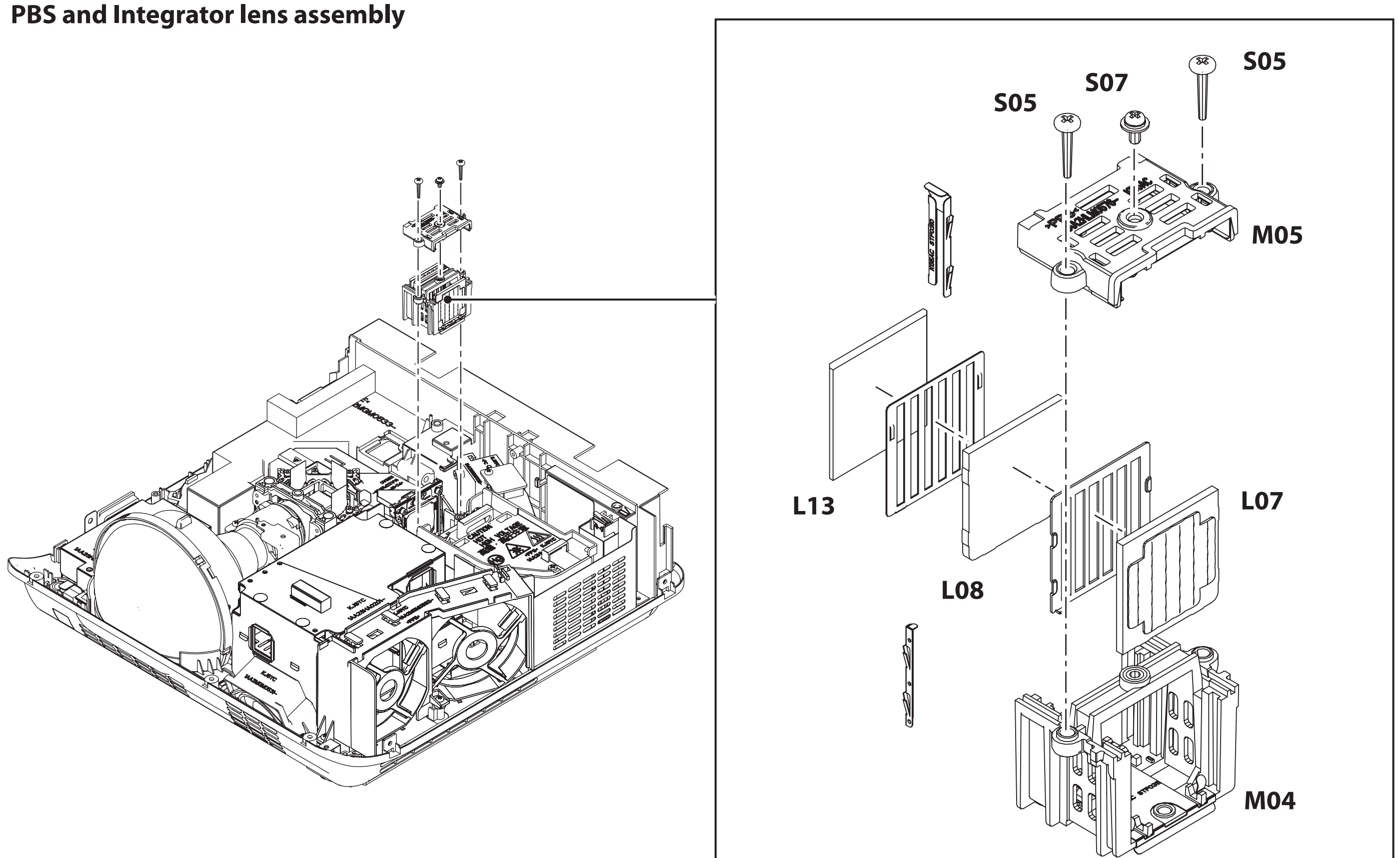


Parts Location Diagrams

Projection Lens

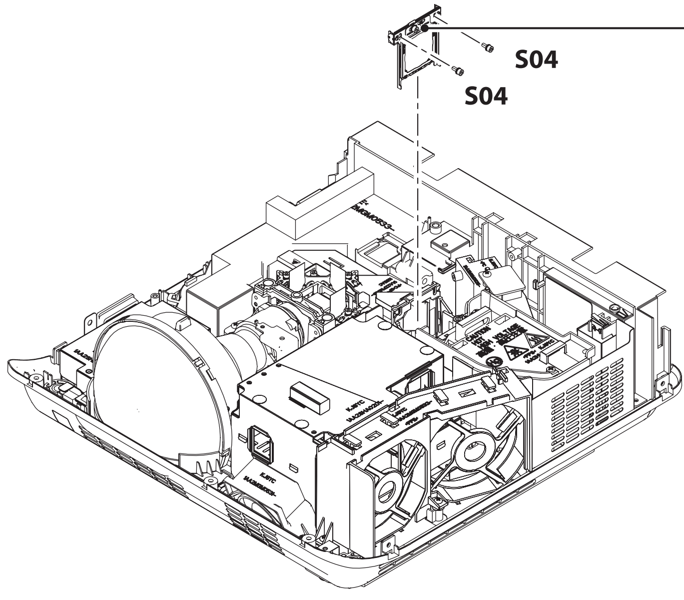


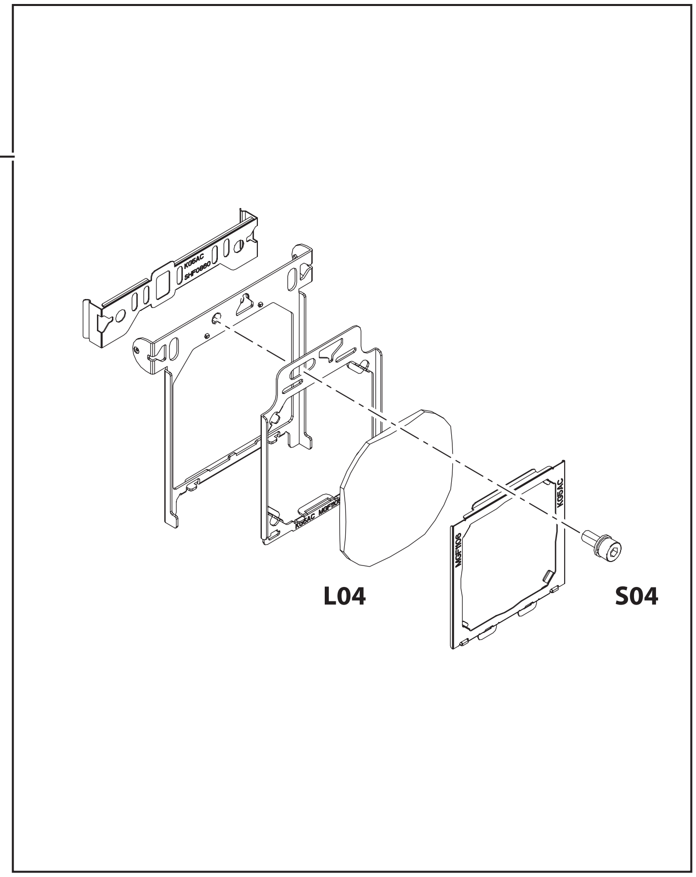
PBS and Integrator lens assembly



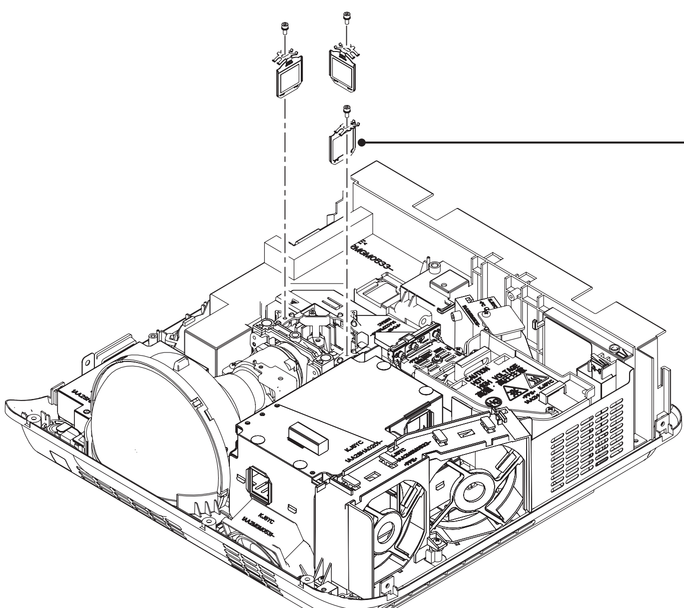
Parts Location Diagrams

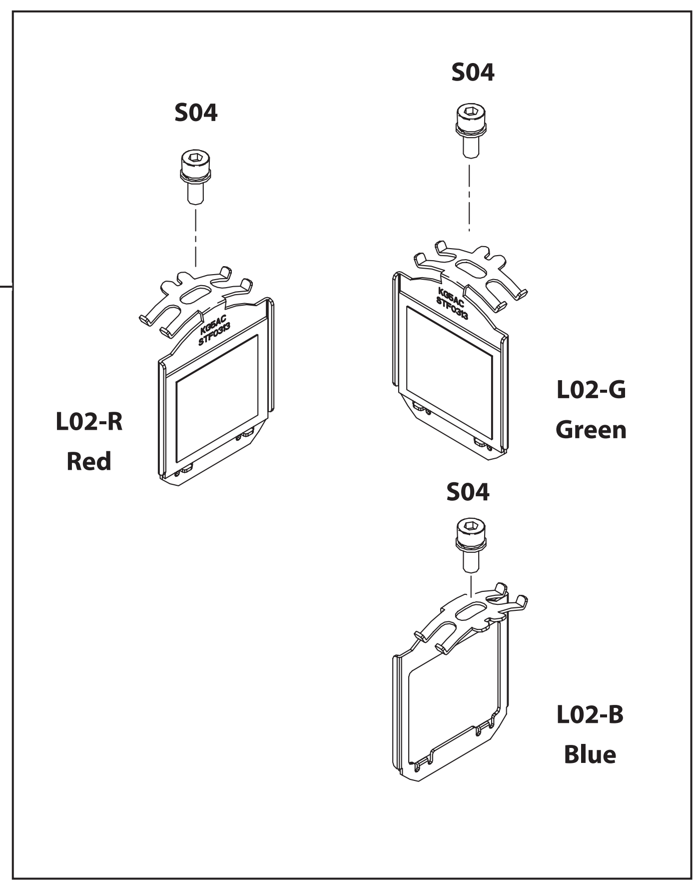
Condenser lens (Out) assembly





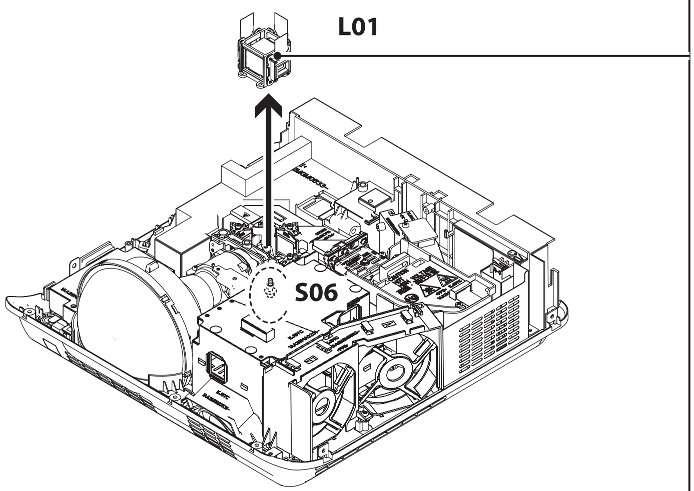
Polarized Glass (In) assembly

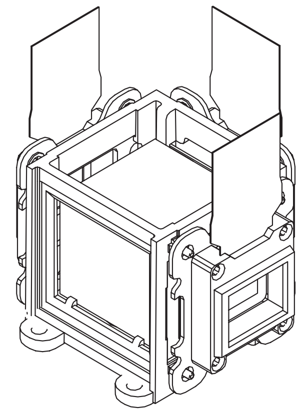




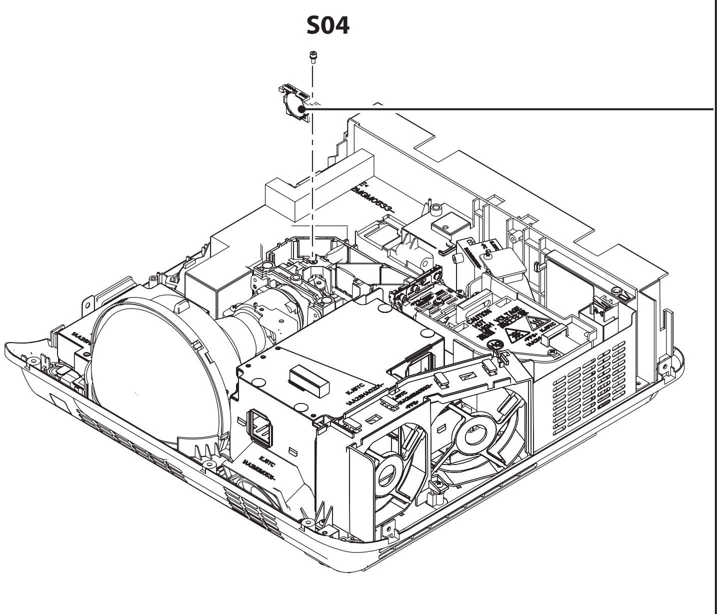
Parts Location Diagrams

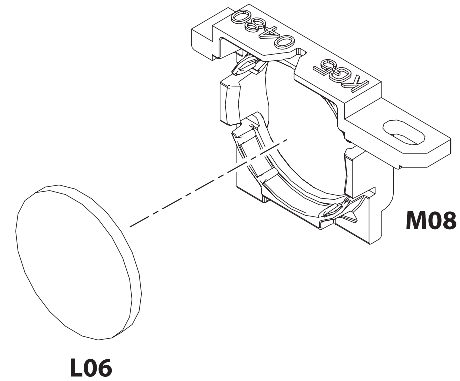
LCD Panel/Prism Assembly



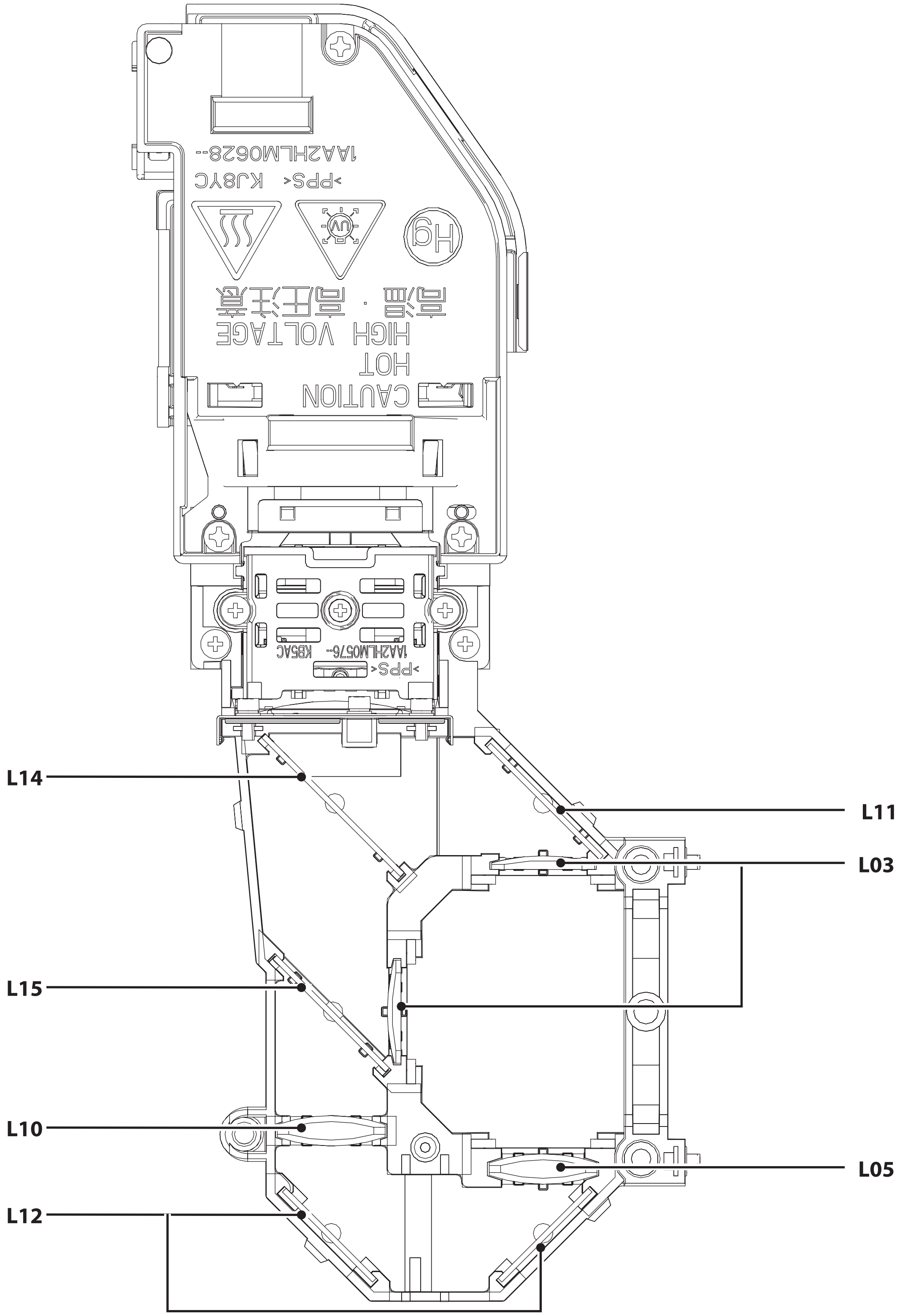


Relay lens (Out) assembly





● In the optical unit

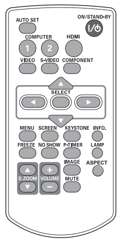


CAUTION:
Part must be placed in specified direction when replacing the optical parts. Please see “Optical Parts Disassembly” for further instructions.

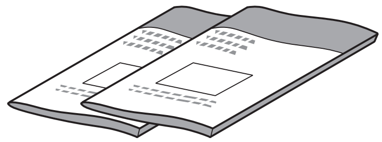
Parts Location Diagrams

● Accessories (see accessories parts list)

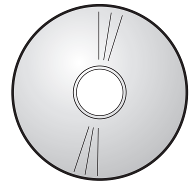
REMOTE CONTROL



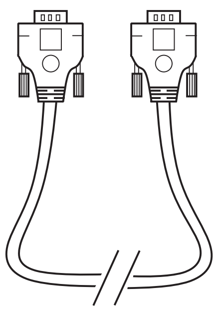
MANUALs



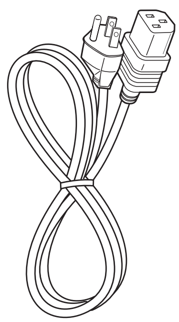
CD-ROMs



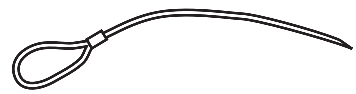
VGA CABLE



AC CORD



STRAP



Mechanical Parts List

Note: Parts order must contain Chassis No., Part No., and Descriptions.

PACKING MATERIALS

Key No.	Part No.	Description
	610 349 8652	CARTON CASE-KJ8AD (PLC-WL2500)
	610 349 8669	CARTON CASE-KJ8AC (PLC-WL2501)
	610 340 0280	POLY BAG-LK6AC
	610 349 8638	CASE ACCESSORY-KJ8YC
	610 349 8560	CUSHION TOP-KJ8AD
	610 352 5051	CUSHION BTM(A)-KJ8AD

ACCESSORIES (PLC-WL2500)

Key No.	Part No.	Description
AC CORD		
US	645 095 0568	CORD,POWER-4.4MK,US
UK	945 054 1149	CORD,POWER-3.138MK
EU	945 054 1156	CORD,POWER-3.0MK
OWNER'S MANUAL		
	610 349 7266	CD-ROM,OWNERS MANUAL-KJ8AD
	655 003 3475	SAFETY MANUAL-KG5AC
	655 003 5899	SETUP INST-KJ8AD
REMOTE CONTROL		
	645 102 1724	ASSY,REMOCON MXBD
	610 344 9944	RC-BATTERY LID-MXAC
MISCELLANEOUS		
	610 350 4711	STRAP CAP-KJ8YC
	945 073 4855	CABLE,INTERFACE VGA
	645 093 1642	CABLE,INTERFACE VGA
	652 002 9552	CABLE,INTERFACE VGA

ACCESSORIES (PLC-WL2501)

Key No.	Part No.	Description
AC CORD		
US	645 095 0568	CORD,POWER-4.4MK,US
UK	945 054 1149	CORD,POWER-3.138MK
EU	945 054 1156	CORD,POWER-3.0MK
OWNER'S MANUAL		
	610 349 7259	CD-ROM,OWNERS MANUAL-KJ8AC
	655 003 3475	SAFETY MANUAL-KG5AC
	655 003 5905	SETUP INST-KJ8AC
REMOTE CONTROL		
	645 103 0221	ASSY,REMOCON MXBW
	610 344 9944	RC-BATTERY LID-MXAC
MISCELLANEOUS		
	610 350 4711	STRAP CAP-KJ8YC
	945 073 4855	CABLE,INTERFACE VGA
	645 093 1642	CABLE,INTERFACE VGA
	652 002 9552	CABLE,INTERFACE VGA

MECHANICAL PARTS

Key No.	Part No.	Description
CABINET PARTS		
C01	610 351 8930	CABINET TOP SERVICE-KJ8AD (PLC-WL2500)
	610 351 8916	CABINET TOP SERVICE-KJ8AC (PLC-WL2501)
C01-1	610 352 3262	SHEET DEC CONTROL-KJ8AD (PLC-WL2500)
	610 352 3255	SHEET DEC CONTROL-KJ8AC (PLC-WL2501)
C02	610 349 8720	COMPL,COVER LMP-KJ8YC
C03	610 349 0083	DEC INLAY LED-KJ8YC
C04	610 351 8923	CABINET BOTTOM SERVICE-KJ8AD
C04-1	610 349 0090	DEC INLAY RC-KJ8YC
C04-2	610 346 8495	DEC LEG-KA8AL
C05	610 348 3788	ASSY STAND LEG-KA8B
* C06	610 349 0076	BUTTON CONTROL-KJ8AC (PLCWL2500 only)
C07	610 349 0106	CAP LNS-KJ8YC
C08	610 352 5044	COVER FLT(A)-KJ8YC
C09	610 349 0199	MOUNT LOCK-KJ8YC
C10	610 349 0069	CAB LEFT AV-KJ8AC
C11	610 351 7834	ASSY FILTER BOX-KJ8YC
CHASSIS PARTS		
M01	610 349 6276	DEC LNS-KJ8YC
M02	610 332 4746	BUSH-KK6A
M03	610 349 0830	BUSH -KJ8AC
M04	610 342 5795	HOLDER INT PBS BTM-KG5AC
M05	610 342 5788	HOLDER INT PBS TOP-KG5AC
M06	610 349 0212	HOLDER LMP HOUSE-KJ8YC
M07	610 349 7280	HLD SENSOR-KJ8YC
M08	610 343 1314	MTG RELAY OUT-KG5AC
M09	610 349 0236	MTG SP-KJ8AC
M10	610 352 0377	MTG EXHAUST FN-KJ8YC
M11	610 349 0243	MOUNTING DUCT PNL TOP-KJ8YC
M12	610 349 0267	MOUNTING DUCT PNL BTM-KJ8YC
M13	610 349 0281	MOUNTING DUCT LMP TOP-KJ8YC
M14	610 349 0274	MOUNTING DUCT LMP BTM-KJ8YC
M15	610 349 0335	SPACER_SHEET_POWER_TOP_KJ8YC
M16	610 349 0359	SPACER_SHEET_POWER_BTM_KJ8YC
M17	610 349 0366	SPACER_SHEET_FILTER-KJ8YC
M18	610 351 5915	OPTICAL BASE BTM-KJ8YC
M19	610 343 1086	OPTICAL BASE TOP-KG5AC
SCREWS		
S01	411 189 7207	SCR S-TPG BIN 3X8
S02	411 031 9304	SCR BIN 3X8
S03	412 077 9105	SPECIAL SCREW
S04	412 077 8108	SPECIAL SCREW-2.5X6
S05	411 189 8303	SCR BIN 3X14
S06	312 070 3400	SPECIAL SCREW-3.0X10V
S07	411 192 5108	SCR PAN+SW+W 2.5X6
OPTICAL PARTS		
L01	610 351 2204	ASSY,PNL/PSM-KJ8YC
L02-R	610 346 5562	ASSY,POL R IN-KG5AC
L02-B	610 346 5548	ASSY,POL B IN-KD5AC
L02-G	610 351 7827	ASSY,POL G IN-KJ8YC
L03	645 096 4657	LENS,CONDENSER(G)
L04	645 099 0564	LENS,CONDENSER(OUT)
L05	645 099 0571	LENS,RELAY(IN)
L06	645 099 0601	LENS,RELAY(OUT)
L07	645 099 9161	LENS,INTEGRATOR(IN)

Mechanical Parts List

Key No.	Part No.	Description
L08	645 099 9178	LENS,INTEGRATOR(OUT)
L09	645 102 3902	LENS,PROJECTION
L10	645 102 9980	LENS,RELAY(IN)
L11	645 096 4701	MIRROR(B)
L11	645 101 0247	MIRROR(B)
L12	645 096 4718	MIRROR(R)
L12	645 101 0254	MIRROR(R)
L13	945 086 6372	PRISM(PBS)
L14	645 099 7396	DICHROIC MIRROR (B)
L15	645 099 7402	DICHROIC MIRROR (G)
SERVICE PARTS		
	610 343 5596	CD-ROM,PJ SVC TOOL V420
OPTION	610 351 2211	ASSY COVER AV-KJ8YC (OPTIONAL TERMINAL COVER)

Electrical Parts List

Product safety should be considered when a component replacement is made in any area of a projector.
Components indicated by a ⚠ mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark.

● Read Description in the parts list

Read description in the Capacitor and Resistor as follows:

CAPACITOR CERAMIC 100P K 50V

50V — Rated Voltage

K — Tolerance Symbols:

Less than 10pF

A : Not specified	B : ±0.1pF	C : ±0.25pF
D : ±0.5pF	E : +0 -1pF	F : ±1PF
G : ±2pF	H : +0.1 -0pF	L : +0 -0.1pF
R : ±0.25 -0pF	S : +0-0.25pF	

More than 10pF

A : Not specified	B : ±0.1%	C : ±0.25%
D : ±0.5%	F : ±1%	G : ±2%
H : ±3%	J : ±5%	K : ±10%
L : ±15%	M : ±20%	N : ±30%
P : +100-0%	Q : +30-10%	T : +50-10%
U : +75-10%	V : +20-10%	W : +100-10%
X : +40-20%	Y : +150-10%	Z : +80-20%

100P — Rated value: P=pico farad, U=micro farad

CERAMIC — Material:

- CERAMIC........... Ceramic
- MT-PAPER......... Metallized Paper
- POLYESTER...... Polyester
- MT-POLYEST..... Metallized Polyester
- POLYPRO.......... Polypropylene
- MT-POLYPRO.... Metallized Polypropylene
- COMPO FILM..... Composite film
- MT-COMPO........ Metallized Composite
- STYRENE........... Styrene
- TA-SOLID........... Tantalum Oxide Solid Electrolytic
- AL-SOLID........... Aluminium Solid Electrolytic
- ELECT................ Aluminum Foil Electrolytic
- NP-ELECT.......... Non-polarised Electrolytic
- OS-SOLID.......... Aluminium Solid with Organic Semiconductive Electrolytic
- POS-SOLID........ Polymerized Organic Semiconductive
- DL-ELECT.......... Double Layered Electrolytic
- PPS-FILM........... Polyphenylene Sulfide Film
- MT-PPS-FILM..... Metalized Polyphenylene Sulfide Film
- MT-PEN-FILM..... Metalized Polyethylenenaphthalate Film
- CAPACITOR....... Other

RESISTOR CARBON 4.7K J A 1/4W

1/4W — Rated Wattage

A — Performance Symbols:

A: General B: Non flammable Z: Low noise

Other: Temperature coefficient

T: ±10ppm/°C	U: ±25ppm/°C	C: ±50ppm/°C
D: ±100ppm/°C	E: ±200ppm/°C	F: ±250ppm/°C
G: ±350ppm/°C	H: ±1000ppm/°C±10%	W: ±1200ppm/°C±10%
Y: ±1400ppm/°C±10%	J: ±2000ppm/°C±10%	K: ±2400ppm/°C±10%
L: ±2700ppm/°C±10%	M: ±3000ppm/°C±10%	N: ±3300ppm/°C±10%
P: ±3600ppm/°C±10%	Q: ±3900ppm/°C±10%	R: ±4200ppm/°C±10%
S: ±4300ppm/°C±10%	V: ±4500ppm/°C±10%	X: ±8000ppm/°C±10%

J — Tolerance Symbols:

A: ±0.05%	B: ±0.1%	C: ±0.25%	D: ±0.5%
F: ±1%	G: ±2%	J: ±5%	K: ±10%
M: ±20%	P: +5-15%	Z: 0 ohm	

4.7K — Rated value, ohms:
K: 1,000, M: 1,000,000

CARBON — Material:

- CARBON........... Carbon
- MT-FILM............ Metal Film
- OXIDE-MT......... Oxide Metal Film
- SOLID................ Composition
- MT-GLAZE......... Metal Glaze
- WIRE WOUND... Wire Wound
- CERAMIC RES.. Ceramic
- FUSIBLE RES.... Fusible
- RESISTOR .... Other

Electrical Parts List

Key No.	Part No.	Description
ASSEMBLED BOARDS (PLC-WL2500)		
⚠ **A100**	**655 003 6995**	**ASSY,PWB,MAIN KJ8AD**
⚠ **A601**	**655 003 6889**	**ASSY,PWB,POWER KJ8AC**
⚠ **A602**	**655 003 6872**	**ASSY,PWB,FILTER KJ8AC**
⚠ **A603**	**655 003 6865**	**ASSY,PWB,R/C KJ8AC**
⚠ **A604**	**655 003 6858**	**ASSY,PWB,TEMP. SENSOR A KJ8AC**
⚠ **A605**	**655 003 6841**	**ASSY,PWB,TEMP. SENSOR C KJ8AC**
⚠ **A2000**	**655 003 6971**	**ASSY,PWB,KEY_SW KJ8AC**
ASSEMBLED BOARDS (PLC-WL2501)		
⚠ **A100**	**655 003 8241**	**ASSY,PWB,MAIN KJ8AC**
⚠ **A601**	**655 003 6889**	**ASSY,PWB,POWER KJ8AC**
⚠ **A602**	**655 003 6872**	**ASSY,PWB,FILTER KJ8AC**
⚠ **A603**	**655 003 6865**	**ASSY,PWB,R/C KJ8AC**
⚠ **A604**	**655 003 6858**	**ASSY,PWB,TEMP. SENSOR A KJ8AC**
⚠ **A605**	**655 003 6841**	**ASSY,PWB,TEMP. SENSOR C KJ8AC**
OUT OF CIRCUIT BOARD		
L601	945 033 2228	CORE,FERRITE
⚠ LP900	610 349 0847	COMP OPT LMP-KJ8AD
⚠ A901	645 102 4770	UNIT,BALLAST
A901A	610 345 4276	CABLE,BALLAST KR5AC
⚠ FN901	645 103 0702	MOTOR,BLW DC 3.96W
⚠ FN902	645 103 0696	MOTOR,BLW DC 3.96W
⚠ FN903	645 103 0702	MOTOR,BLW DC 3.96W
⚠ FN904	645 103 0696	MOTOR,BLW DC 3.96W
⚠ FN905	645 103 0702	MOTOR,BLW DC 3.96W
⚠ FN906	645 103 0689	MOTOR,FAN DC 5.28W
⚠ FN907	645 103 0689	MOTOR,FAN DC 5.28W
K10A1	312 073 0406	SPECIAL SCREW
K10A2	312 073 0406	SPECIAL SCREW
K10B1	312 073 0406	SPECIAL SCREW
K10B2	312 073 0406	SPECIAL SCREW
K40B1	312 073 0406	SPECIAL SCREW
K40B2	312 073 0406	SPECIAL SCREW
SP901	652 003 2699	SPEAKER,8
SW901	645 097 3925	SWITCH,MICRO 1P-2T
⚠ Z6B&6C	652 003 3078	ASSY,WIRE (SW902)
Z8I&6S	652 003 2187	ASSY,WIRE
Z8L&6L	652 003 2170	ASSY,WIRE
A100	**655 003 6995**	**ASSY,PWB,MAIN KJ8AD (PLC-WL2500)**
A100	**655 003 8241**	**ASSY,PWB,MAIN KJ8AC (PLC-WL2501)**

* Parts indicated with * are used for only model PLC-WL2500.

Key No.	Part No.	Description
TRANSISTOR		
Q1001	406 021 7804	TR 2SC4617
Q1002	406 021 7804	TR 2SC4617
Q1003	305 217 7815	TR HN1B04FE-Y TE85L
Q1004	305 217 7815	TR HN1B04FE-Y TE85L
Q1005	406 021 7804	TR 2SC4617
Q1006	305 217 7815	TR HN1B04FE-Y TE85L
Q1007	406 021 7804	TR 2SC4617
Q1008	406 021 7804	TR 2SC4617
Q1012	406 021 7804	TR 2SC4617
Q2011	406 021 7804	TR 2SC4617
Q2021	406 021 7804	TR 2SC4617
Q2025	406 021 7804	TR 2SC4617
Q2031	406 021 7804	TR 2SC4617
Q3582	305 217 6917	TR TPC6107 TE85L
Q3583	406 021 7804	TR 2SC4617
Q3601	406 021 7804	TR 2SC4617
Q4012	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q4014	305 217 7815	TR HN1B04FE-Y TE85L
Q5031	405 221 7914	TR HN1C01FE-Y
Q5035	405 221 7914	TR HN1C01FE-Y
Q5061	405 221 7914	TR HN1C01FE-Y
Q5062	405 221 7914	TR HN1C01FE-Y
Q5306	406 021 7804	TR 2SC4617
Q5700	305 217 7815	TR HN1B04FE-Y TE85L
Q5701	305 174 1819	TR CPH3424-TL-E
Q5830	305 217 6917	TR TPC6107 TE85L
Q5840	406 021 7804	TR 2SC4617
Q6845	405 221 7914	TR HN1C01FE-Y
Q6846	405 221 7914	TR HN1C01FE-Y
Q691	406 021 7804	TR 2SC4617
Q7081	305 002 8327	TR 2SA1203-Y-TE12L
Q7082	406 021 7804	TR 2SC4617
Q7801	406 021 7804	TR 2SC4617
Q7813	305 217 7815	TR HN1B04FE-Y TE85L
Q7814	305 217 7815	TR HN1B04FE-Y TE85L
Q7842	305 217 7815	TR HN1B04FE-Y TE85L
Q7864	305 217 7815	TR HN1B04FE-Y TE85L
INTEGRATED CIRCUIT		
IC1051	409 697 3913	IC LE24C023M-TLM-E
IC1371	410 656 8600	IC 24AA64T-I/MS
IC1424	410 666 5804	IC UPC358GR-9LG-E1-A
IC301	309 670 8419	IC PW190-10L
IC302	309 487 5727	IC TC7SZ125FU
IC3801	409 699 2815	IC MAX232ECPWR
IC4001	410 686 4702	IC EL5306IUZ-T7
IC4701	309 428 8428	IC TC7WT125FU-TE12L
IC4891	309 395 5915	IC TC7SH00FU-(TE85L)
IC5001	409 683 5716	IC NJW1156AV
IC5542	410 656 8501	IC XC6216BC02MR
IC5602	309 578 6210	IC PQ1M505M2SPQ
IC5621	410 651 0104	IC R1131D101B-TR-F
IC5821	410 706 4804	IC TPS54225PWPR
IC5841	309 598 5217	IC TAR5S25
IC5861	410 706 4804	IC TPS54225PWPR
IC592	309 461 7822	IC PQ20WZ11
IC7811	410 706 4705	IC TPS54286PWPR
IC7841	309 461 7822	IC PQ20WZ11
IC8001	409 698 5510	IC SII9127ACTU
IC801	410 702 7809	IC M29W640FT70N6EKJ8AC
IC8092	409 704 7613	IC LV59012M-TLM-H
IC841	409 699 3010	IC PT7M7809STE
IC8801	410 702 7700	IC PIC18F67J60-I/PT-KJ8AC
IC8802	410 656 8600	IC 24AA64T-I/MS
IC8803	410 681 5506	IC LE25FU106BMA-TLM-H
CAPACITOR		
C016	303 396 9613	CERAMIC 1U K 25V
	303 397 7618	CERAMIC 1U K 25V
	403 478 5912	CERAMIC 1U K 25V

Electrical Parts List

Key No.	Part No.	Description		
C017	303 400 9110	ELECT	470U M	25V
C018	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C019	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C021	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
C022	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C023	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C024	303 367 0410	CERAMIC	0.1U K	50V
	303 370 1510	CERAMIC	0.1U K	50V
C025	303 367 0410	CERAMIC	0.1U K	50V
	303 370 1510	CERAMIC	0.1U K	50V
C027	303 450 2215	CERAMIC	0.22U K	25V
C028	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C029	303 367 0410	CERAMIC	0.1U K	50V
	303 370 1510	CERAMIC	0.1U K	50V
C030	303 367 0410	CERAMIC	0.1U K	50V
	303 370 1510	CERAMIC	0.1U K	50V
C031	303 398 4418	ELECT	10U M	25V
C032	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C033	303 450 2215	CERAMIC	0.22U K	25V
C035	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C038	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C039	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C041	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C042	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C047	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C048	303 256 9319	CERAMIC	0.47U Z	50V
C1002	303 398 3312	ELECT	47U M	10V
	303 387 6119	ELECT	47U M	10V
C1004	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1006	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1007	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1008	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1009	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1011	303 454 0415	CERAMIC	0.068U K	16V

Key No.	Part No.	Description		
	303 442 0519	CERAMIC	0.068U K	16V
C1012	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1014	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C1016	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C1017	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C1018	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C1019	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1049	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1061	303 398 3312	ELECT	47U M	10V
	303 387 6119	ELECT	47U M	10V
C1092	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C1103	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1105	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1331	303 276 1911	CERAMIC	22P J	50V
C1332	403 456 4616	CERAMIC	27P J	50V
	303 309 2519	CERAMIC	27P J	50V
C1371	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1421	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C1422	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1423	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1424	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1429	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1431	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1432	403 467 0911	CERAMIC	0.1U K	25V
C1441	303 401 3810	ELECT	10U M	25V
	303 424 1510	ELECT	10.0U M	25V
C1442	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C1871	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C2001	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C2002	303 398 3312	ELECT	47U M	10V
	303 387 6119	ELECT	47U M	10V
C2003	303 384 4712	TA-SOLID	47U M	6.3V
	303 449 1212	POS-SOLID	47U M	6.3V
C2025	303 372 7510	CERAMIC	2.2U K	6.3V

Electrical Parts List

Key No.	Part No.	Description		
	303 370 0216	CERAMIC	2.2U K	6.3V
C2026	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C2031	303 453 6319	CERAMIC	100P J	50V
	303 454 0910	CERAMIC	100P J	50V
	303 294 6110	CERAMIC	100P J	50V
C2041	303 453 6319	CERAMIC	100P J	50V
	303 454 0910	CERAMIC	100P J	50V
	303 294 6110	CERAMIC	100P J	50V
C2891	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C2892	303 453 7217	CERAMIC	47P J	50V
	303 454 1610	CERAMIC	47P J	50V
	303 305 8812	CERAMIC	47P J	50V
C2893	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C2894	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C301	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C302	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C303	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C304	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C306	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C307	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C308	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C309	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C310	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C311	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C312	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C313	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C314	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C315	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C316	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C317	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C318	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C319	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C320	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C321	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C322	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C323	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C324	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C326	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C327	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C328	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C329	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C330	403 457 2512	CERAMIC	0.47U K	10V
	303 376 6311	CERAMIC	0.47U K	10V
C331	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C332	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C333	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C334	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C335	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C336	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C337	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C338	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C339	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C341	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V

Electrical Parts List

Key No.	Part No.	Description		
C342	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C343	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C344	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C346	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C347	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C348	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3501	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3502	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3503	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3504	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3506	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
C3508	303 437 4614	CERAMIC	10U K	25V
	403 478 5714	CERAMIC	10U K	25V
C3509	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C351	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3511	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3512	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3513	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3514	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3516	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3517	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3518	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3519	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C352	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V

Key No.	Part No.	Description		
C3521	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3522	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3523	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3524	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3526	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3527	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3528	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C353	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3531	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3532	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3533	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3534	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3536	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
C3538	303 437 4614	CERAMIC	10U K	25V
	403 478 5714	CERAMIC	10U K	25V
C3539	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C354	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3541	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3542	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3543	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3544	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3546	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3547	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3548	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V

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Key No.	Part No.	Description		
C3549	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C355	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3551	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3552	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3553	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3554	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3556	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3557	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3558	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C356	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3561	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3562	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3563	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3564	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3566	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
C3568	303 437 4614	CERAMIC	10U K	25V
	403 478 5714	CERAMIC	10U K	25V
C3569	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C357	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3571	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3572	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3573	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3574	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3576	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V

Key No.	Part No.	Description		
C3577	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3578	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3579	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C358	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3581	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3582	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3583	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3584	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3586	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3587	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3588	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3598	303 394 5815	CERAMIC	4.7U K	16V
	303 441 5515	CERAMIC	4.7U K	16V
C3599	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C361	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C362	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C363	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C364	303 454 0613	CERAMIC	10000P K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C365	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C366	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C367	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C368	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C369	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C370	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C371	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C372	403 457 2512	CERAMIC	0.47U K	10V
	303 376 6311	CERAMIC	0.47U K	10V

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Key No.	Part No.	Description		
C373	403 457 2512	CERAMIC	0.47U K	10V
	303 376 6311	CERAMIC	0.47U K	10V
C374	403 457 2512	CERAMIC	0.47U K	10V
	303 376 6311	CERAMIC	0.47U K	10V
C377	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C378	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C379	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C380	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3801	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C3802	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C3803	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C3804	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C3806	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C381	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C382	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C383	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C384	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C385	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C388	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C4001	303 382 7814	CERAMIC	2.2U K	10V
	303 394 5211	CERAMIC	22U K	10V
C4002	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C4003	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C4004	303 372 7510	CERAMIC	2.2U K	6.3V
	303 370 0216	CERAMIC	2.2U K	6.3V
C401	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C403	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C406	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C407	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C411	303 453 8917	CERAMIC	0.1U K	16V

Key No.	Part No.	Description		
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C413	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C414	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C417	303 372 7510	CERAMIC	2.2U K	6.3V
	303 370 0216	CERAMIC	2.2U K	6.3V
C421	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C423	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C426	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C427	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C431	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C432	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C433	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C434	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C436	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C438	303 454 0613	CERAMIC	10000P K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C439	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C441	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C442	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C443	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C480	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C481	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C4891	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5001	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5002	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5004	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5006	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V

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Key No.	Part No.	Description		
	403 478 5912	CERAMIC	1U K	25V
C5007	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5009	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C501	303 298 9612	CERAMIC	0.1U K	16V
C5011	303 394 5815	CERAMIC	4.7U K	16V
	303 441 5515	CERAMIC	4.7U K	16V
C5012	303 394 5815	CERAMIC	4.7U K	16V
	303 441 5515	CERAMIC	4.7U K	16V
C5013	303 394 5815	CERAMIC	4.7U K	16V
	303 441 5515	CERAMIC	4.7U K	16V
C5014	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C502	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5024	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5025	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5026	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C503	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5038	303 454 0613	CERAMIC	10000P K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C5039	303 454 0613	CERAMIC	10000P K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C504	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5041	303 454 0613	CERAMIC	10000P K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C506	303 298 9612	CERAMIC	0.1U K	16V
C5061	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5062	303 381 9918	ELECT	470U M	16V
	303 407 3517	ELECT	470U M	16V
C5069	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C507	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C508	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
C509	303 372 7510	CERAMIC	2.2U K	6.3V
	303 370 0216	CERAMIC	2.2U K	6.3V
C5098	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C511	303 397 8219	CERAMIC	2.2U K	25V
	403 454 6414	CERAMIC	2.2U K	25V
C512	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C513	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C514	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C516	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V

Key No.	Part No.	Description		
	403 478 5912	CERAMIC	1U K	25V
C517	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C518	303 342 3313	CERAMIC	0.1U K	25V
C519	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C521	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C523	303 342 3313	CERAMIC	0.1U K	25V
C524	303 342 3313	CERAMIC	0.1U K	25V
C527	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C528	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5304	303 454 0613	CERAMIC	10000P K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C531	303 298 9612	CERAMIC	0.1U K	16V
C5315	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5316	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C532	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C533	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5333	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5334	303 453 6814	CERAMIC	68P J	50V
	303 454 0019	CERAMIC	68P J	50V
	303 320 0419	CERAMIC	68P J	50V
C5336	303 453 6319	CERAMIC	100P J	50V
	303 454 0910	CERAMIC	100P J	50V
	303 294 6110	CERAMIC	100P J	50V
C5337	303 453 6319	CERAMIC	100P J	50V
	303 454 0910	CERAMIC	100P J	50V
	303 294 6110	CERAMIC	100P J	50V
C534	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C536	303 298 9612	CERAMIC	0.1U K	16V
C537	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C538	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
C539	303 372 7510	CERAMIC	2.2U K	6.3V
	303 370 0216	CERAMIC	2.2U K	6.3V
C541	303 397 8219	CERAMIC	2.2U K	25V
	403 454 6414	CERAMIC	2.2U K	25V
C542	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C543	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C544	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V

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Key No.	Part No.	Description		
C546	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C547	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C548	303 342 3313	CERAMIC	0.1U K	25V
C549	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C551	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C553	303 342 3313	CERAMIC	0.1U K	25V
C554	303 342 3313	CERAMIC	0.1U K	25V
C5541	303 437 4614	CERAMIC	10U K	25V
	403 478 5714	CERAMIC	10U K	25V
C5542	403 467 0911	CERAMIC	0.1U K	25V
C5544	303 392 1215	ELECT	47U M	6.3V
	303 387 5310	ELECT	47U M	6.3V
C5548	303 381 9918	ELECT	470U M	16V
	303 407 3517	ELECT	470U M	16V
C557	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C558	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C561	303 298 9612	CERAMIC	0.1U K	16V
C5612	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5613	303 392 1215	ELECT	47U M	6.3V
	303 387 5310	ELECT	47U M	6.3V
C5614	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5615	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5616	303 398 3312	ELECT	47U M	10V
	303 387 6119	ELECT	47U M	10V
C562	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5621	303 383 5215	CERAMIC	4.7U K	6.3V
C5623	303 383 5215	CERAMIC	4.7U K	6.3V
C563	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C564	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C566	303 298 9612	CERAMIC	0.1U K	16V
C567	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C568	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
C569	303 372 7510	CERAMIC	2.2U K	6.3V
	303 370 0216	CERAMIC	2.2U K	6.3V
C5705	303 376 3112	ELECT	100U M	25V
C5706	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5707	303 324 6417	CERAMIC	0.022U K	16V
C5708	303 397 5713	ELECT	100U M	10V
C571	303 397 8219	CERAMIC	2.2U K	25V
	403 454 6414	CERAMIC	2.2U K	25V
C572	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C573	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C574	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C576	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C577	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C578	303 342 3313	CERAMIC	0.1U K	25V
C579	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C581	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5821	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5822	303 279 5114	CERAMIC	3300P K	50V
C5823	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5824	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5825	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5827	303 392 5015	CERAMIC	22U M	6.3V
	403 455 9216	CERAMIC	22U M	6.3V
	303 443 9214	CERAMIC	22U M	6.3V
C5828	303 392 5015	CERAMIC	22U M	6.3V
	403 455 9216	CERAMIC	22U M	6.3V
	303 443 9214	CERAMIC	22U M	6.3V
C583	303 342 3313	CERAMIC	0.1U K	25V
C584	303 342 3313	CERAMIC	0.1U K	25V
C5840	303 372 7510	CERAMIC	2.2U K	6.3V
	303 370 0216	CERAMIC	2.2U K	6.3V
C5841	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C5843	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C5844	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5860	303 298 9612	CERAMIC	0.1U K	16V
C5862	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5863	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5864	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5866	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5867	303 284 4317	CERAMIC	0.022U K	50V
	304 103 3006	CERAMIC	0.022U K	50V
	304 090 1504	CERAMIC	0.022U K	50V

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Key No.	Part No.	Description		
C5869	303 392 5015	CERAMIC	22U M	6.3V
	403 455 9216	CERAMIC	22U M	6.3V
	303 443 9214	CERAMIC	22U M	6.3V
C587	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5871	303 392 5015	CERAMIC	22U M	6.3V
	403 455 9216	CERAMIC	22U M	6.3V
	303 443 9214	CERAMIC	22U M	6.3V
C588	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C596	403 467 0911	CERAMIC	0.1U K	25V
C597	303 437 4614	CERAMIC	10U K	25V
	403 478 5714	CERAMIC	10U K	25V
C598	403 467 0911	CERAMIC	0.1U K	25V
C599	303 437 4614	CERAMIC	10U K	25V
	403 478 5714	CERAMIC	10U K	25V
* C6801	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
* C6802	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
* C6803	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C7095	303 379 0217	POS-SOLID	68U M	6.3V
C7812	303 437 4614	CERAMIC	10U K	25V
	403 478 5714	CERAMIC	10U K	25V
C7813	303 437 4614	CERAMIC	10U K	25V
	403 478 5714	CERAMIC	10U K	25V
C7814	303 397 8219	CERAMIC	2.2U K	25V
	403 454 6414	CERAMIC	2.2U K	25V
C7815	303 275 3015	CERAMIC	0.047U K	16V
	304 103 5802	CERAMIC	0.047U K	16V
	304 095 2902	CERAMIC	0.047U K	16V
C7816	303 453 7217	CERAMIC	47P J	50V
	303 454 1610	CERAMIC	47P J	50V
C7817	303 454 0613	CERAMIC	10000P K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C7821	403 457 2512	CERAMIC	0.47U K	10V
	303 376 6311	CERAMIC	0.47U K	10V
C7822	403 457 2512	CERAMIC	0.47U K	10V
	303 376 6311	CERAMIC	0.47U K	10V
C7827	303 381 5613	ELECT	220U M	16V
	303 423 8916	ELECT	220U M	16V
C7831	303 275 3015	CERAMIC	0.047U K	16V
	304 103 5802	CERAMIC	0.047U K	16V
	304 095 2902	CERAMIC	0.047U K	16V
C7832	303 453 7217	CERAMIC	47P J	50V
	303 454 1610	CERAMIC	47P J	50V
C7833	303 381 5613	ELECT	220U M	16V
	303 423 8916	ELECT	220U M	16V
C7837	303 454 0613	CERAMIC	10000P K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C7839	303 394 5815	CERAMIC	4.7U K	16V
	303 441 5515	CERAMIC	4.7U K	16V
C7841	303 437 4614	CERAMIC	10U K	25V
	403 478 5714	CERAMIC	10U K	25V
C7842	403 467 0911	CERAMIC	0.1U K	25V
C7843	303 376 3112	ELECT	100U M	25V
C7844	403 467 0911	CERAMIC	0.1U K	25V
C8001	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8002	303 453 8917	CERAMIC	0.1U K	16V

Key No.	Part No.	Description		
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8003	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8004	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8006	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8007	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8008	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8009	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C801	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8011	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8012	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8013	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8014	303 139 7715	CERAMIC	7P D	50V
C8016	303 157 1610	CERAMIC	6P D	50V
C8017	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8018	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8019	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8021	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8022	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8023	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8024	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8026	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8027	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8028	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8029	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V

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Key No.	Part No.	Description		
C8031	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8032	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8033	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8034	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8036	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8037	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8038	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8093	303 379 0217	POS-SOLID	68U M	6.3V
C8096	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8097	303 441 5515	CERAMIC	4.7U K	16V
C8301	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8302	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8303	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C841	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C842	303 392 1215	ELECT	47U M	6.3V
	303 387 5310	ELECT	47U M	6.3V
C843	303 454 0613	CERAMIC	10000P K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C844	303 453 8511	CERAMIC	1000P K	50V
	303 454 1214	CERAMIC	1000P K	50V
C8801	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8802	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8803	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8806	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8807	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C8808	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C8809	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8810	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V

Key No.	Part No.	Description		
C8811	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8812	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8814	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8815	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8817	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8818	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8819	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8820	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8821	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8822	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C8823	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8824	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C8832	303 454 0613	CERAMIC	10000P K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C9875	303 453 7217	CERAMIC	47P J	50V
	303 454 1610	CERAMIC	47P J	50V
	303 305 8812	CERAMIC	47P J	50V
C9878	303 324 6417	CERAMIC	0.022U K	16V
C9882	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C9883	303 392 1215	ELECT	47U M	6.3V
	303 387 5310	ELECT	47U M	6.3V
C9884	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C9885	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C9888	303 376 6212	CERAMIC	0.22U K	10V
RESISTOR				
R008	301 276 4710	MT-GLAZE	0.000 ZA	1/3W
R009	301 150 6212	MT-GLAZE	1K JA	1/10W
R011	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R012	301 276 4710	MT-GLAZE	0.000 ZA	1/3W
R013	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R015	301 265 0310	MT-GLAZE	3.9K FA	1/10W
R016	301 265 3113	MT-GLAZE	5.6K FA	1/10W
R021	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R022	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R1001	301 260 4115	MT-GLAZE	75 JA	1/3W
R1002	301 225 1210	MT-GLAZE	4.7K JA	1/16W

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Key No.	Part No.	Description		
R1004	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R1006	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R1009	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R1012	301 224 8814	MT-GLAZE	100 JA	1/16W
R1021	301 260 4115	MT-GLAZE	75 JA	1/3W
R1022	301 224 8814	MT-GLAZE	100 JA	1/16W
R1025	301 260 4214	MT-GLAZE	82 JA	1/3W
R1026	301 260 4214	MT-GLAZE	82 JA	1/3W
R1028	301 260 4214	MT-GLAZE	82 JA	1/3W
R1029	301 225 2019	MT-GLAZE	680 JA	1/16W
R1031	301 225 1418	MT-GLAZE	47K JA	1/16W
R1032	301 225 1814	MT-GLAZE	47 JA	1/16W
R1034	301 225 1814	MT-GLAZE	47 JA	1/16W
R1035	301 225 1814	MT-GLAZE	47 JA	1/16W
R1036	301 225 1814	MT-GLAZE	47 JA	1/16W
R1037	301 225 1814	MT-GLAZE	47 JA	1/16W
R1038	301 224 8814	MT-GLAZE	100 JA	1/16W
R1039	301 225 1814	MT-GLAZE	47 JA	1/16W
R1040	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R1041	301 225 1418	MT-GLAZE	47K JA	1/16W
R1043	301 224 9019	MT-GLAZE	10K JA	1/16W
R1044	301 224 9019	MT-GLAZE	10K JA	1/16W
R1045	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1046	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1049	301 224 8814	MT-GLAZE	100 JA	1/16W
R1050	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R1052	301 263 7420	MT-GLAZE	75 JA	1/16W
R1060	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R1062	301 263 7420	MT-GLAZE	75 JA	1/16W
R1063	301 225 2019	MT-GLAZE	680 JA	1/16W
R1064	301 225 2019	MT-GLAZE	680 JA	1/16W
R1065	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R1066	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R1069	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R1070	301 263 7420	MT-GLAZE	75 JA	1/16W
R1072	301 263 7420	MT-GLAZE	75 JA	1/16W
R1075	301 263 7420	MT-GLAZE	75 JA	1/16W
R1077	301 263 7420	MT-GLAZE	75 JA	1/16W
R1078	301 263 7420	MT-GLAZE	75 JA	1/16W
R1079	301 263 7420	MT-GLAZE	75 JA	1/16W
R1080	301 263 7420	MT-GLAZE	75 JA	1/16W
R1081	301 225 1418	MT-GLAZE	47K JA	1/16W
R1083	301 225 1814	MT-GLAZE	47 JA	1/16W
R1084	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R1085	301 225 1814	MT-GLAZE	47 JA	1/16W
R1088	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R1091	301 225 1418	MT-GLAZE	47K JA	1/16W
R1101	301 224 8814	MT-GLAZE	100 JA	1/16W
R1111	301 260 4115	MT-GLAZE	75 JA	1/3W
R1134	301 225 1814	MT-GLAZE	47 JA	1/16W
R1331	301 224 9415	MT-GLAZE	1M JA	1/16W
R1421	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1422	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1434	301 264 3718	MT-GLAZE	1.5K FA	1/10W
R1435	401 344 5110	MT-GLAZE	15K DA	1/16W
R1436	401 344 5110	MT-GLAZE	15K DA	1/16W
R1439	301 225 0619	MT-GLAZE	5.6K JA	1/16W
R1442	301 287 2227	MT-GLAZE	22K FA	1/16W
R1444	301 235 0012	MT-GLAZE	7.5K JA	1/16W
R1446	301 235 0012	MT-GLAZE	7.5K JA	1/16W
R1447	301 225 1517	MT-GLAZE	3.9K JA	1/16W
R1448	301 224 9019	MT-GLAZE	10K JA	1/16W
R2002	301 224 8814	MT-GLAZE	100 JA	1/16W
R2006	301 037 5116	MT-GLAZE	10 JA	1/10W
R2007	301 037 5116	MT-GLAZE	10 JA	1/10W
R2011	301 224 8814	MT-GLAZE	100 JA	1/16W
R2012	301 260 4115	MT-GLAZE	75 JA	1/3W
R2016	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R2018	301 260 4115	MT-GLAZE	75 JA	1/3W
R2021	301 224 8814	MT-GLAZE	100 JA	1/16W
R2022	301 224 8814	MT-GLAZE	100 JA	1/16W
R2024	301 224 8814	MT-GLAZE	100 JA	1/16W
R2025	301 224 9415	MT-GLAZE	1M JA	1/16W
R2026	301 224 8913	MT-GLAZE	100K JA	1/16W
R2027	301 224 8913	MT-GLAZE	100K JA	1/16W
R2028	301 224 9910	MT-GLAZE	22K JA	1/16W
R2029	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R2031	301 224 8913	MT-GLAZE	100K JA	1/16W
R2032	301 224 8814	MT-GLAZE	100 JA	1/16W
R2033	301 260 4115	MT-GLAZE	75 JA	1/3W
R2034	301 224 8814	MT-GLAZE	100 JA	1/16W
R2036	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R2041	301 224 8913	MT-GLAZE	100K JA	1/16W
R2043	301 224 8814	MT-GLAZE	100 JA	1/16W
R2053	301 224 8814	MT-GLAZE	100 JA	1/16W
R2054	301 224 8814	MT-GLAZE	100 JA	1/16W
R2892	301 224 8814	MT-GLAZE	100 JA	1/16W
R300	301 224 9019	MT-GLAZE	10K JA	1/16W
R302	301 227 5612	MT-GLAZE	8.2K JA	1/16W
R303	301 224 9316	MT-GLAZE	1K JA	1/16W
R304	301 224 9316	MT-GLAZE	1K JA	1/16W
R306	401 342 7314	MT-GLAZE	23.2K FA	1/16W
R307	301 224 9712	MT-GLAZE	22 JA	1/16W
R308	301 224 9712	MT-GLAZE	22 JA	1/16W
R309	301 224 9316	MT-GLAZE	1K JA	1/16W
R311	301 224 9316	MT-GLAZE	1K JA	1/16W
R315	301 225 1814	MT-GLAZE	47 JA	1/16W
R317	301 225 1814	MT-GLAZE	47 JA	1/16W
R318	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R319	301 224 9019	MT-GLAZE	10K JA	1/16W
R320	301 225 1814	MT-GLAZE	47 JA	1/16W
R321	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R322	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R323	301 225 1814	MT-GLAZE	47 JA	1/16W
R327	301 225 8011	MT-GLAZE	330 JA	1/16W
R339	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R341	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R342	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R343	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R344	301 225 1814	MT-GLAZE	47 JA	1/16W
R345	301 225 1814	MT-GLAZE	47 JA	1/16W
R346	301 225 1814	MT-GLAZE	47 JA	1/16W
R347	301 224 8814	MT-GLAZE	100 JA	1/16W
R348	301 224 8814	MT-GLAZE	100 JA	1/16W
R349	301 225 1814	MT-GLAZE	47 JA	1/16W
R350	301 263 7420	MT-GLAZE	75 JA	1/16W
R3502	301 225 1418	MT-GLAZE	47K JA	1/16W
R351	301 224 8814	MT-GLAZE	100 JA	1/16W
R352	301 224 8814	MT-GLAZE	100 JA	1/16W
R353	301 263 7420	MT-GLAZE	75 JA	1/16W
R3532	301 225 1418	MT-GLAZE	47K JA	1/16W
R354	301 224 8814	MT-GLAZE	100 JA	1/16W
R355	301 224 8814	MT-GLAZE	100 JA	1/16W
R3562	301 225 1418	MT-GLAZE	47K JA	1/16W
R3580	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R3585	301 224 9019	MT-GLAZE	10K JA	1/16W
R3586	301 224 9316	MT-GLAZE	1K JA	1/16W
R3587	301 224 9019	MT-GLAZE	10K JA	1/16W
R3588	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R359	301 225 0015	MT-GLAZE	270 JA	1/16W
R360	301 225 0015	MT-GLAZE	270 JA	1/16W
R3601	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R3602	301 224 9019	MT-GLAZE	10K JA	1/16W
R3603	301 224 9019	MT-GLAZE	10K JA	1/16W

Electrical Parts List

	Key No.	Part No.	Description		
	R361	301 256 1517	MT-GLAZE	13K JA	1/10W
	R3621	301 224 9019	MT-GLAZE	10K JA	1/16W
	R3622	301 224 9019	MT-GLAZE	10K JA	1/16W
	R3623	301 224 9019	MT-GLAZE	10K JA	1/16W
	R3626	301 224 9019	MT-GLAZE	10K JA	1/16W
	R3627	301 224 9019	MT-GLAZE	10K JA	1/16W
	R3628	301 224 9019	MT-GLAZE	10K JA	1/16W
	R363	301 224 9316	MT-GLAZE	1K JA	1/16W
	R3631	301 224 9019	MT-GLAZE	10K JA	1/16W
	R3632	301 224 9019	MT-GLAZE	10K JA	1/16W
	R364	301 224 9316	MT-GLAZE	1K JA	1/16W
	R366	301 224 9316	MT-GLAZE	1K JA	1/16W
	R367	301 225 1814	MT-GLAZE	47 JA	1/16W
	R368	301 225 1814	MT-GLAZE	47 JA	1/16W
	R369	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R371	301 229 3913	MT-GLAZE	180 JA	1/16W
	R372	301 229 3913	MT-GLAZE	180 JA	1/16W
	R373	301 229 3913	MT-GLAZE	180 JA	1/16W
	R374	301 229 3913	MT-GLAZE	180 JA	1/16W
	R375	301 294 3313	MT-GLAZE	15K FA	1/16W
	R378	301 224 9019	MT-GLAZE	10K JA	1/16W
	R380	301 224 9019	MT-GLAZE	10K JA	1/16W
	R3801	301 225 8110	MT-GLAZE	10 JA	1/16W
	R3802	301 225 8110	MT-GLAZE	10 JA	1/16W
	R3803	301 225 8110	MT-GLAZE	10 JA	1/16W
	R3804	301 225 8516	MT-GLAZE	1.8K JA	1/16W
	R3806	301 225 1517	MT-GLAZE	3.9K JA	1/16W
	R382	301 263 7420	MT-GLAZE	75 JA	1/16W
	R388	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R389	301 225 0817	MT-GLAZE	68K JA	1/16W
	R391	301 224 9019	MT-GLAZE	10K JA	1/16W
*	R395	301 224 9019	MT-GLAZE	10K JA	1/16W
*	R396	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
		(PLC-WL2501 only)			
	R398	301 224 8814	MT-GLAZE	100 JA	1/16W
	R4001	301 224 8814	MT-GLAZE	100 JA	1/16W
	R4014	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R4016	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R4017	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R4023	301 224 9019	MT-GLAZE	10K JA	1/16W
	R4024	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R406	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R407	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R4072	301 224 8814	MT-GLAZE	100 JA	1/16W
	R4077	301 224 8814	MT-GLAZE	100 JA	1/16W
	R408	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R412	301 225 1814	MT-GLAZE	47 JA	1/16W
	R414	301 225 1814	MT-GLAZE	47 JA	1/16W
	R416	301 225 1814	MT-GLAZE	47 JA	1/16W
	R418	301 225 1814	MT-GLAZE	47 JA	1/16W
	R419	301 225 1814	MT-GLAZE	47 JA	1/16W
	R422	301 225 1814	MT-GLAZE	47 JA	1/16W
	R423	301 225 1814	MT-GLAZE	47 JA	1/16W
	R424	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R425	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R472	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R4834	301 225 3818	MT-GLAZE	1.5K JA	1/16W
	R4862	301 225 7915	MT-GLAZE	220 JA	1/16W
	R4863	301 225 7915	MT-GLAZE	220 JA	1/16W
	R5001	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
	R5002	301 225 8110	MT-GLAZE	10 JA	1/16W
	R5003	301 225 8110	MT-GLAZE	10 JA	1/16W
	R5004	301 224 8913	MT-GLAZE	100K JA	1/16W
	R5005	301 224 8913	MT-GLAZE	100K JA	1/16W
	R5006	301 224 8913	MT-GLAZE	100K JA	1/16W
	R5007	301 224 8913	MT-GLAZE	100K JA	1/16W
	R5008	301 224 8913	MT-GLAZE	100K JA	1/16W

Key No.	Part No.	Description		
R5009	301 224 8913	MT-GLAZE	100K JA	1/16W
R501	301 224 8814	MT-GLAZE	100 JA	1/16W
R5031	301 224 8814	MT-GLAZE	100 JA	1/16W
R5032	301 224 8814	MT-GLAZE	100 JA	1/16W
R5033	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R5034	301 224 9316	MT-GLAZE	1K JA	1/16W
R5036	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R5037	301 224 9316	MT-GLAZE	1K JA	1/16W
R5044	301 224 9019	MT-GLAZE	10K JA	1/16W
R5046	301 224 9019	MT-GLAZE	10K JA	1/16W
R5047	301 224 9613	MT-GLAZE	2.7K JA	1/16W
R5048	301 224 9316	MT-GLAZE	1K JA	1/16W
R5061	301 224 9316	MT-GLAZE	1K JA	1/16W
R5062	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R5063	301 224 9316	MT-GLAZE	1K JA	1/16W
R5064	301 224 9316	MT-GLAZE	1K JA	1/16W
R5066	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R5067	301 224 9316	MT-GLAZE	1K JA	1/16W
R5069	301 225 8011	MT-GLAZE	330 JA	1/16W
R507	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R508	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R511	301 224 8814	MT-GLAZE	100 JA	1/16W
R512	301 224 8814	MT-GLAZE	100 JA	1/16W
R516	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5213	301 224 8814	MT-GLAZE	100 JA	1/16W
R5215	301 224 8814	MT-GLAZE	100 JA	1/16W
R5220	301 224 8814	MT-GLAZE	100 JA	1/16W
R5223	301 224 8814	MT-GLAZE	100 JA	1/16W
R531	301 224 8814	MT-GLAZE	100 JA	1/16W
R5317	301 225 1814	MT-GLAZE	47 JA	1/16W
R5318	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R5342	301 225 1418	MT-GLAZE	47K JA	1/16W
R5346	301 226 2414	MT-GLAZE	560 JA	1/16W
R5349	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R537	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R538	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R541	301 224 8814	MT-GLAZE	100 JA	1/16W
R542	301 224 8814	MT-GLAZE	100 JA	1/16W
R546	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5541	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R5542	301 224 9316	MT-GLAZE	1K JA	1/16W
R5545	301 224 9613	MT-GLAZE	2.7K JA	1/16W
R5607	301 224 9316	MT-GLAZE	1K JA	1/16W
R561	301 224 8814	MT-GLAZE	100 JA	1/16W
R5611	301 224 8814	MT-GLAZE	100 JA	1/16W
R567	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R568	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5701	301 259 7823	MT-GLAZE	20K JA	1/16W
R5702	301 225 0718	MT-GLAZE	56K JA	1/16W
R5703	301 224 9019	MT-GLAZE	10K JA	1/16W
R5704	301 224 8814	MT-GLAZE	100 JA	1/16W
R5705	301 224 9019	MT-GLAZE	10K JA	1/16W
R5706	301 224 9019	MT-GLAZE	10K JA	1/16W
R571	301 224 8814	MT-GLAZE	100 JA	1/16W
R5712	301 253 3712	MT-GLAZE	0.000 ZA	1/4W
	301 035 4111	MT-GLAZE	0.000 ZA	1/8W
R5716	301 276 4710	MT-GLAZE	0.000 ZA	1/3W
R572	301 224 8814	MT-GLAZE	100 JA	1/16W
R576	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5822	301 224 8913	MT-GLAZE	100K JA	1/16W
R5823	301 265 4516	MT-GLAZE	68K FA	1/10W
R5824	401 343 0512	MT-GLAZE	7.5K FA	1/16W
R5825	301 287 2227	MT-GLAZE	22K FA	1/16W
R5837	301 224 9019	MT-GLAZE	10K JA	1/16W
R5838	301 224 9316	MT-GLAZE	1K JA	1/16W
R5839	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R5840	301 224 9019	MT-GLAZE	10K JA	1/16W

Electrical Parts List

	Key No.	Part No.	Description		
	R5841	301 224 9316	MT-GLAZE	1K JA	1/16W
	R5842	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
	R5860	301 224 8913	MT-GLAZE	100K JA	1/16W
	R5863	301 294 3511	MT-GLAZE	27K FA	1/16W
	R5864	301 284 3326	MT-GLAZE	3K FA	1/16W
	R5865	301 287 2227	MT-GLAZE	22K FA	1/16W
	R5867	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R593	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
	R594	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
	R595	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R596	401 344 1914	MT-GLAZE	10K DA	1/16W
	R597	401 351 3710	MT-GLAZE	1.8K DA	1/16W
	R598	401 351 2010	MT-GLAZE	240 DA	1/16W
	R599	301 224 9316	MT-GLAZE	1K JA	1/16W
	R6803	301 224 9019	MT-GLAZE	10K JA	1/16W
*	R6804	301 225 0213	MT-GLAZE	3.3K JA	1/16W
*	R6812	301 225 0213	MT-GLAZE	3.3K JA	1/16W
	R6813	301 224 9019	MT-GLAZE	10K JA	1/16W
*	R6822	301 224 9316	MT-GLAZE	1K JA	1/16W
	R6823	301 224 9019	MT-GLAZE	10K JA	1/16W
	R6842	301 229 3913	MT-GLAZE	180 JA	1/16W
	R6843	301 229 3913	MT-GLAZE	180 JA	1/16W
	R6845	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R6848	301 225 8011	MT-GLAZE	330 JA	1/16W
	R6851	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R6852	301 225 1517	MT-GLAZE	3.9K JA	1/16W
	R6853	301 225 1517	MT-GLAZE	3.9K JA	1/16W
	R6854	301 225 1517	MT-GLAZE	3.9K JA	1/16W
	R6856	301 225 1517	MT-GLAZE	3.9K JA	1/16W
	R6857	301 224 9118	MT-GLAZE	150 JA	1/16W
	R6858	301 224 9118	MT-GLAZE	150 JA	1/16W
	R6870	301 225 8011	MT-GLAZE	330 JA	1/16W
	R6873	301 229 3913	MT-GLAZE	180 JA	1/16W
	R6874	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R6877	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R6881	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R6882	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R6883	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R691	301 162 2417	MT-GLAZE	1.2K JA	1/10W
	R692	301 224 9316	MT-GLAZE	1K JA	1/16W
	R7081	301 224 9019	MT-GLAZE	10K JA	1/16W
	R7082	301 225 8011	MT-GLAZE	330 JA	1/16W
	R7083	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R7084	301 224 9019	MT-GLAZE	10K JA	1/16W
	R7087	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R7801	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R7803	301 276 3010	MT-GLAZE	75K JA	1/16W
	R7805	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R7817	301 224 9019	MT-GLAZE	10K JA	1/16W
	R7818	301 299 4810	MT-GLAZE	2.7K FA	1/16W
	R7819	301 264 6115	MT-GLAZE	20K FA	1/10W
	R7821	301 294 2910	MT-GLAZE	560 FA	1/16W
	R7823	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R7824	301 301 8010	MT-GLAZE	1.5K FA	1/16W
	R7825	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R7826	301 225 8110	MT-GLAZE	10 JA	1/16W
	R7827	301 225 8110	MT-GLAZE	10 JA	1/16W
	R7828	301 224 9019	MT-GLAZE	10K JA	1/16W
	R7829	301 224 9316	MT-GLAZE	1K JA	1/16W
	R7830	301 224 9019	MT-GLAZE	10K JA	1/16W
	R7831	301 224 9316	MT-GLAZE	1K JA	1/16W
	R7832	301 225 0213	MT-GLAZE	3.3K JA	1/16W
	R7833	301 224 9514	MT-GLAZE	2.2K JA	1/16W
	R7836	301 225 1517	MT-GLAZE	3.9K JA	1/16W
	R7841	301 336 8818	MT-GLAZE	6.8K FA	1/16W
	R7842	301 294 2811	MT-GLAZE	2.2K FA	1/16W
	R7843	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R7844	301 225 8516	MT-GLAZE	1.8K JA	1/16W
	R7845	301 224 9316	MT-GLAZE	1K JA	1/16W
	R7846	301 225 0213	MT-GLAZE	3.3K JA	1/16W
	R7847	301 286 4717	MT-GLAZE	30K JA	1/16W
	R7848	301 224 9019	MT-GLAZE	10K JA	1/16W
	R7863	301 224 9316	MT-GLAZE	1K JA	1/16W
	R7871	301 301 8010	MT-GLAZE	1.5K FA	1/16W
	R7872	301 294 2910	MT-GLAZE	560 FA	1/16W
	R7873	301 264 6115	MT-GLAZE	20K FA	1/10W
	R7874	301 299 4810	MT-GLAZE	2.7K FA	1/16W
	R7878	301 224 9019	MT-GLAZE	10K JA	1/16W
	R7879	301 224 9316	MT-GLAZE	1K JA	1/16W
	R7881	301 224 9316	MT-GLAZE	1K JA	1/16W
	R7882	301 225 0213	MT-GLAZE	3.3K JA	1/16W
	R7883	301 224 9514	MT-GLAZE	2.2K JA	1/16W
	R8001	301 264 5316	MT-GLAZE	2.2 JA	1/10W
	R8002	301 264 5316	MT-GLAZE	2.2 JA	1/10W
	R8003	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R8004	301 224 9415	MT-GLAZE	1M JA	1/16W
	R8008	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R8009	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R801	301 224 9019	MT-GLAZE	10K JA	1/16W
	R8014	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R8016	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R8017	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R8018	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R8020	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R8022	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R8023	301 264 5316	MT-GLAZE	2.2 JA	1/10W
	R8029	301 225 0312	MT-GLAZE	33 JA	1/16W
	R8031	301 225 0312	MT-GLAZE	33 JA	1/16W
	R8032	301 225 0312	MT-GLAZE	33 JA	1/16W
	R8033	301 225 0312	MT-GLAZE	33 JA	1/16W
	R8034	301 225 0312	MT-GLAZE	33 JA	1/16W
	R8039	301 341 0616	MT-GLAZE	49.9 FA	1/16W
	R804	301 224 9019	MT-GLAZE	10K JA	1/16W
	R8042	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R8043	301 225 1418	MT-GLAZE	47K JA	1/16W
	R8044	301 225 1418	MT-GLAZE	47K JA	1/16W
	R8045	301 240 9116	MT-GLAZE	5.6 JA	1/16W
	R8046	301 240 9116	MT-GLAZE	5.6 JA	1/16W
	R8047	301 240 9116	MT-GLAZE	5.6 JA	1/16W
	R8048	301 240 9116	MT-GLAZE	5.6 JA	1/16W
	R8049	301 341 0616	MT-GLAZE	49.9 FA	1/16W
	R8051	301 240 9116	MT-GLAZE	5.6 JA	1/16W
	R8052	301 240 9116	MT-GLAZE	5.6 JA	1/16W
	R8053	301 240 9116	MT-GLAZE	5.6 JA	1/16W
	R8054	301 240 9116	MT-GLAZE	5.6 JA	1/16W
	R8056	301 225 1418	MT-GLAZE	47K JA	1/16W
	R8057	301 225 1418	MT-GLAZE	47K JA	1/16W
	R8059	301 341 0616	MT-GLAZE	49.9 FA	1/16W
	R806	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R8069	301 341 0616	MT-GLAZE	49.9 FA	1/16W
	R807	301 224 9019	MT-GLAZE	10K JA	1/16W
	R808	301 224 9019	MT-GLAZE	10K JA	1/16W
	R8086	301 225 1210	MT-GLAZE	4.7K JA	1/16W
	R809	301 225 8516	MT-GLAZE	1.8K JA	1/16W
	R8097	301 224 9019	MT-GLAZE	10K JA	1/16W
	R812	301 224 9316	MT-GLAZE	1K JA	1/16W
	R813	301 224 9316	MT-GLAZE	1K JA	1/16W
	R8311	301 224 9712	MT-GLAZE	22 JA	1/16W
	R8312	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R8313	301 224 9712	MT-GLAZE	22 JA	1/16W
	R8314	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R8316	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
	R846	301 224 9316	MT-GLAZE	1K JA	1/16W
	R848	301 226 1516	MT-GLAZE	0.000 ZA	1/16W

Electrical Parts List

Key No.	Part No.	Description
R851	301 224 9316	MT-GLAZE 1K JA 1/16W
R852	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R8801	301 224 9316	MT-GLAZE 1K JA 1/16W
R8802	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8804	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R8805	301 224 9316	MT-GLAZE 1K JA 1/16W
R8806	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8807	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8808	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8809	301 224 8814	MT-GLAZE 100 JA 1/16W
R8810	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8811	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8814	301 224 9415	MT-GLAZE 1M JA 1/16W
R8815	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R8816	301 264 6511	MT-GLAZE 2.2K FA 1/10W
R8831	301 224 9019	MT-GLAZE 10K JA 1/16W
R8833	301 225 7915	MT-GLAZE 220 JA 1/16W
R8834	301 224 9712	MT-GLAZE 22 JA 1/16W
R8837	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8838	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8839	301 225 7915	MT-GLAZE 220 JA 1/16W
R8840	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8841	301 224 9019	MT-GLAZE 10K JA 1/16W
R8843	301 224 9019	MT-GLAZE 10K JA 1/16W
R8844	301 224 9019	MT-GLAZE 10K JA 1/16W
R8846	301 224 8913	MT-GLAZE 100K JA 1/16W
R8853	301 225 8110	MT-GLAZE 10 JA 1/16W
R8854	301 225 8110	MT-GLAZE 10 JA 1/16W
R9873	301 255 7312	MT-GLAZE 510K JA 1/10W
R9874	301 224 8913	MT-GLAZE 100K JA 1/16W
R9875	301 224 8913	MT-GLAZE 100K JA 1/16W
R9876	301 225 8110	MT-GLAZE 10 JA 1/16W
R9878	301 225 3818	MT-GLAZE 1.5K JA 1/16W
R9881	301 224 9019	MT-GLAZE 10K JA 1/16W
R9882	301 225 8110	MT-GLAZE 10 JA 1/16W
R9883	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R9884	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R9886	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R9888	301 224 9316	MT-GLAZE 1K JA 1/16W
R9889	301 225 8110	MT-GLAZE 10 JA 1/16W
R9890	301 225 8110	MT-GLAZE 10 JA 1/16W
R9891	301 225 8110	MT-GLAZE 10 JA 1/16W
R9895	301 225 8011	MT-GLAZE 330 JA 1/16W
R9897	301 224 9712	MT-GLAZE 22 JA 1/16W
R9898	301 224 9712	MT-GLAZE 22 JA 1/16W
R9899	301 224 9712	MT-GLAZE 22 JA 1/16W
R9902	301 224 9019	MT-GLAZE 10K JA 1/16W
R9903	301 224 9019	MT-GLAZE 10K JA 1/16W
R9904	301 224 9019	MT-GLAZE 10K JA 1/16W
R9905	301 224 9019	MT-GLAZE 10K JA 1/16W
R9906	301 225 0817	MT-GLAZE 68K JA 1/16W
R9907	301 224 8814	MT-GLAZE 100 JA 1/16W
R9908	301 224 8814	MT-GLAZE 100 JA 1/16W
R9909	301 224 8814	MT-GLAZE 100 JA 1/16W
R9910	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R9914	301 224 9019	MT-GLAZE 10K JA 1/16W
R9915	301 224 9019	MT-GLAZE 10K JA 1/16W
R9916	301 224 9019	MT-GLAZE 10K JA 1/16W
R9917	301 224 9019	MT-GLAZE 10K JA 1/16W
R9918	301 224 9019	MT-GLAZE 10K JA 1/16W
RB312	945 037 0831	R-NETWORK 47X4 1/16W
RB313	945 037 0831	R-NETWORK 47X4 1/16W
RB316	945 037 0831	R-NETWORK 47X4 1/16W
RB318	945 037 0831	R-NETWORK 47X4 1/16W
RB319	945 037 0831	R-NETWORK 47X4 1/16W
RB411	945 037 0831	R-NETWORK 47X4 1/16W
RB412	945 037 0831	R-NETWORK 47X4 1/16W
RB413	945 037 0831	R-NETWORK 47X4 1/16W
RB414	945 037 0831	R-NETWORK 47X4 1/16W
RB416	945 037 0831	R-NETWORK 47X4 1/16W
RB417	945 037 0831	R-NETWORK 47X4 1/16W
RB418	945 037 0831	R-NETWORK 47X4 1/16W
RB419	945 037 0831	R-NETWORK 47X4 1/16W
RB421	945 037 0831	R-NETWORK 47X4 1/16W
RB422	945 037 0831	R-NETWORK 47X4 1/16W
RB423	945 037 0831	R-NETWORK 47X4 1/16W
RB424	945 037 0831	R-NETWORK 47X4 1/16W
RB426	945 037 0831	R-NETWORK 47X4 1/16W
RB427	945 037 0831	R-NETWORK 47X4 1/16W
RB428	945 037 0831	R-NETWORK 47X4 1/16W
RB429	945 037 0831	R-NETWORK 47X4 1/16W
RB431	945 037 0831	R-NETWORK 47X4 1/16W
RB432	945 037 0831	R-NETWORK 47X4 1/16W
RB433	945 037 0831	R-NETWORK 47X4 1/16W
RB434	945 037 0831	R-NETWORK 47X4 1/16W
RB436	945 037 0831	R-NETWORK 47X4 1/16W
RB437	945 037 0831	R-NETWORK 47X4 1/16W
RB501	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB503	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB506	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB531	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB533	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB536	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB561	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB563	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB566	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB568	945 028 0697	R-NETWORK 100X4 1/16W
RB8001	645 049 0675	R-NETWORK 33X4 1/32W
	945 049 0690	R-NETWORK 33X4 1/16W
RB8002	645 049 0675	R-NETWORK 33X4 1/32W
	945 049 0690	R-NETWORK 33X4 1/16W
RB8003	645 049 0675	R-NETWORK 33X4 1/32W
	945 049 0690	R-NETWORK 33X4 1/16W
RB8004	645 049 0675	R-NETWORK 33X4 1/32W
	945 049 0690	R-NETWORK 33X4 1/16W
RB8006	645 049 0675	R-NETWORK 33X4 1/32W
	945 049 0690	R-NETWORK 33X4 1/16W
RB8007	645 049 0675	R-NETWORK 33X4 1/32W
	945 049 0690	R-NETWORK 33X4 1/16W
RB8008	945 049 0690	R-NETWORK 33X4 1/16W

COIL

Key No.	Part No.	Description
L001	652 002 8500	INDUCTOR 330OHM, P
L011	945 062 2855	INDUCTOR,33U M
L012	945 062 2855	INDUCTOR,33U M
L1002	945 086 7577	FILTER,EMI 400MHZ
L1012	945 086 7577	FILTER,EMI 400MHZ
L1022	945 086 7577	FILTER,EMI 400MHZ
L1051	945 086 7577	FILTER,EMI 400MHZ
L1061	945 086 7577	FILTER,EMI 400MHZ
L1071	945 086 7577	FILTER,EMI 400MHZ
L1421	652 002 8500	INDUCTOR 330OHM, P
L2011	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
L2012	945 068 8318	FILTER,EMI 100MHZ
L2021	301 037 5017	MT-GLAZE 0.000 ZA 1/10W

Electrical Parts List

	Key No.	Part No.	Description
	L2022	945 068 8318	FILTER,EMI 100MHZ
	L2031	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
	L2032	945 068 8318	FILTER,EMI 100MHZ
	L2041	945 068 8325	FILTER,EMI 20MHZ
	L2051	945 068 8325	FILTER,EMI 20MHZ
*	L2881	652 002 8524	INDUCTOR 220OHM, P
*	L2882	652 002 8524	INDUCTOR 220OHM, P
*	L2883	652 002 8524	INDUCTOR 220OHM, P
*	L2884	652 002 8524	INDUCTOR 220OHM, P
	L2891	652 002 8524	INDUCTOR 220OHM, P
	L2892	652 002 8685	INDUCTOR 1000OHM, P
	L2893	652 002 8524	INDUCTOR 220OHM, P
	L2894	652 002 8524	INDUCTOR 220OHM, P
	L2896	652 002 8524	INDUCTOR 220OHM, P
	L2897	652 002 8524	INDUCTOR 220OHM, P
	L2898	652 002 8524	INDUCTOR 220OHM, P
	L2899	652 002 8524	INDUCTOR 220OHM, P
	L301	652 002 8524	INDUCTOR 220OHM, P
	L302	652 002 8524	INDUCTOR 220OHM, P
	L303	652 002 8524	INDUCTOR 220OHM, P
	L304	652 002 8524	INDUCTOR 220OHM, P
	L305	652 002 8524	INDUCTOR 220OHM, P
	L306	652 002 8524	INDUCTOR 220OHM, P
	L307	652 002 8524	INDUCTOR 220OHM, P
	L308	652 002 8524	INDUCTOR 220OHM, P
	L309	652 002 8524	INDUCTOR 220OHM, P
	L311	652 002 8524	INDUCTOR 220OHM, P
	L312	652 002 8524	INDUCTOR 220OHM, P
	L313	652 002 8524	INDUCTOR 220OHM, P
	L314	652 002 8524	INDUCTOR 220OHM, P
	L3501	652 002 8500	INDUCTOR 330OHM, P
	L3531	652 002 8500	INDUCTOR 330OHM, P
	L3534	945 041 2210	INDUCTOR,0.12U K
	L3561	945 041 1978	INDUCTOR,330 OHM
	L3622	652 002 8524	INDUCTOR 220OHM, P
	L3623	652 002 8524	INDUCTOR 220OHM, P
	L3626	652 002 8524	INDUCTOR 220OHM, P
	L3627	652 002 8524	INDUCTOR 220OHM, P
	L3628	652 002 8685	INDUCTOR 1000OHM, P
	L3630	652 002 8524	INDUCTOR 220OHM, P
	L3631	652 002 8685	INDUCTOR 1000OHM, P
	L3633	652 002 8685	INDUCTOR 1000OHM, P
	L3634	652 002 8685	INDUCTOR 1000OHM, P
	L3636	652 002 8524	INDUCTOR 220OHM, P
	L3637	652 002 8524	INDUCTOR 220OHM, P
	L3638	652 002 8685	INDUCTOR 1000OHM, P
	L3639	652 002 8524	INDUCTOR 220OHM, P
	L3691	652 002 8685	INDUCTOR 1000OHM, P
	L3692	652 002 8685	INDUCTOR 1000OHM, P
	L3693	652 002 8685	INDUCTOR 1000OHM, P
	L402	652 002 8500	INDUCTOR 330OHM, P
	L4809	652 002 8685	INDUCTOR 1000OHM, P
	L4810	652 002 8685	INDUCTOR 1000OHM, P
	L4811	652 002 8685	INDUCTOR 1000OHM, P
	L4812	652 002 8524	INDUCTOR 220OHM, P
	L4814	652 002 8685	INDUCTOR 1000OHM, P
	L501	652 002 8500	INDUCTOR 330OHM, P
	L502	652 002 8500	INDUCTOR 330OHM, P
	L5031	652 002 8524	INDUCTOR 220OHM, P
	L5032	652 002 8524	INDUCTOR 220OHM, P
	L531	652 002 8500	INDUCTOR 330OHM, P
	L532	652 002 8500	INDUCTOR 330OHM, P
	L5332	945 032 8344	INDUCTOR,39U J
	L5606	652 002 8500	INDUCTOR 330OHM, P
	L5608	652 002 8500	INDUCTOR 330OHM, P
	L5609	652 002 8500	INDUCTOR 330OHM, P
	L561	652 002 8500	INDUCTOR 330OHM, P

Key No.	Part No.	Description
L562	652 002 8500	INDUCTOR 330OHM, P
L5662	652 002 8500	INDUCTOR 330OHM, P
L5701	652 002 8500	INDUCTOR 330OHM, P
L5702	652 002 8500	INDUCTOR 330OHM, P
L5703	652 002 8500	INDUCTOR 330OHM, P
L5821	945 062 2879	INDUCTOR,4.7U M
L5822	652 002 8500	INDUCTOR 330OHM, P
L5827	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
L5828	652 002 8500	INDUCTOR 330OHM, P
L5830	652 002 8500	INDUCTOR 330OHM, P
L5831	652 002 8500	INDUCTOR 330OHM, P
L5848	652 002 8500	INDUCTOR 330OHM, P
L5861	945 062 2879	INDUCTOR,4.7U M
L5862	652 002 8500	INDUCTOR 330OHM, P
L5867	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
L5868	652 002 8500	INDUCTOR 330OHM, P
L7081	652 002 8500	INDUCTOR 330OHM, P
L7811	652 003 1890	INDUCTOR,15U, M
L7861	652 003 1890	INDUCTOR,15U, M
L8001	945 086 6600	IMPEDANCE,220 OHM P
L8002	945 086 6600	IMPEDANCE,220 OHM P
L8003	945 086 6600	IMPEDANCE,220 OHM P
L8004	945 086 6600	IMPEDANCE,220 OHM P
L8006	945 086 6600	IMPEDANCE,220 OHM P
L8007	945 086 6600	IMPEDANCE,220 OHM P
L8010	945 070 3660	INDUCTOR,90 OHM
L8011	945 070 3660	INDUCTOR,90 OHM
L8012	945 070 3660	INDUCTOR,90 OHM
L8013	945 070 3660	INDUCTOR,90 OHM
L8091	652 002 8500	INDUCTOR 330OHM, P
L8166	652 002 8524	INDUCTOR 220OHM, P
L8801	945 068 8318	FILTER,EMI 100MHZ
L8835	645 100 9340	IMPEDANCE,120 OHM P
L8836	645 100 9340	IMPEDANCE,120 OHM P

DIODE

Key No.	Part No.	Description
D1001	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D1002	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D1003	307 205 5216	DIODE RB521S-30-TE61
D1004	307 205 5216	DIODE RB521S-30-TE61
D2025	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D2891	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D2892	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D2893	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D2894	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D2896	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D2897	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D2898	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B

Electrical Parts List

Key No.	Part No.	Description
D2899	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D3601	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3602	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3611	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3613	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3614	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3617	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3621	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3622	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3623	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3626	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3628	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3629	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3631	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D3644	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D5061	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D5062	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D5602	307 210 5416	DIODE RB551V-30-TE-17
D5603	307 210 5416	DIODE RB551V-30-TE-17
D5625	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D591	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D592	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
* D6801	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
* D6802	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
* D6803	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
* D6804	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D6831	408 068 5508	LED KPT-2012YC
D6833	307 203 7816	LED SML-210LT T86 M
		LED KPT-2012SRC-PRV
D6835	408 068 5201	LED KPTB-1612ESGC
D6840	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D6841	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D6842	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D6845	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D6846	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
	408 063 7507	ZENER DIODE MM3Z6V2B
D6850	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D6851	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D6852	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D6853	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D6854	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D7081	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D7812	407 267 5114	DIODE SS3P4-E3/84A
D7862	407 267 5114	DIODE SS3P4-E3/84A
D8091	407 267 5114	DIODE SS3P4-E3/84A
D8092	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D8093	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
D8094	307 235 0816	DIODE 1SS387 TPL3
	307 210 1923	DIODE 1SS400 TE-61
MISCELLANEOUS		
K10A	952 001 8601	SOCKET,D-SUB 15P
K10B	952 001 8571	SOCKET,D-SUB 15P
K20A	945 076 2735	JACK,RCA-2
	952 001 9585	JACK,RCA-2
K20B	945 067 6124	TERMINAL,BOARD
	952 001 7932	TERMINAL, BOARD
K20C	652 002 1808	JACK,PHONE D3.6
	652 002 4847	JACK,PHONE D3.6
K40B	652 002 8135	PLUG,D-SUB 9P
K8001	645 095 3637	SOCKET,IF(HDMI) 19P
	945 085 7431	SOCKET,IF(HDMI) 19P
	652 003 2194	SOCKET,HDMI 19P
K9602	645 093 6760	TRANS,PULSE
	652 003 2743	TRANS,PULSE
SC1030	945 076 3503	SURGE-ABSORBER
SC1041	945 076 3503	SURGE-ABSORBER
SC1081	945 076 3503	SURGE-ABSORBER
SC1091	945 076 3503	SURGE-ABSORBER
SC2011	945 076 3503	SURGE-ABSORBER
SC2021	945 076 3503	SURGE-ABSORBER
SC2022	945 076 3503	SURGE-ABSORBER
SC2023	945 076 3503	SURGE-ABSORBER
SC2031	945 076 3503	SURGE-ABSORBER
SC2032	945 076 3503	SURGE-ABSORBER
SC2041	945 076 3503	SURGE-ABSORBER
SC2042	945 076 3503	SURGE-ABSORBER
SC2051	945 076 3503	SURGE-ABSORBER
SC3801	945 076 3503	SURGE-ABSORBER
SC3802	945 076 3503	SURGE-ABSORBER
SC5031	945 076 3503	SURGE-ABSORBER
SC5032	945 076 3503	SURGE-ABSORBER
SC8001	945 076 3503	SURGE-ABSORBER
SC8002	945 076 3503	SURGE-ABSORBER
X1331	645 102 6934	OSC,CRYSTAL 27.000MHZ
X8001	645 102 6934	OSC,CRYSTAL 27.000MHZ
X8802	945 083 7556	OSC,CRYSTAL 25.0MHZ
X9885	945 060 9900	OSC,CERAMIC 8.00MHZ

Electrical Parts List

Key No.	Part No.	Description		
A601	**655 003 6889**	**ASSY,PWB,POWER KJ8AC**		
TRANSISTOR				
Q611	305 146 6405	TR 2SK2837		
Q641	305 014 4512	TR 2SC2412K T146 R		
	305 014 4611	TR 2SC2412K T146 S		
	305 015 8727	TR 2SC2812-L6-TB		
	305 015 8925	TR 2SC2812-L7-TB		
	305 163 1615	TR 2SC2812N-L6-TB0		
	305 173 9816	TR 2SC3928A1R		
	305 173 9915	TR 2SC3928A1S		
Q642	305 014 4512	TR 2SC2412K T146 R		
	305 014 4611	TR 2SC2412K T146 S		
	305 015 8727	TR 2SC2812-L6-TB		
	305 015 8925	TR 2SC2812-L7-TB		
	305 163 1615	TR 2SC2812N-L6-TB0		
	305 173 9816	TR 2SC3928A1R		
	305 173 9915	TR 2SC3928A1S		
Q643	406 022 4901	TR 2SK4085LS-CB11		
Q651	305 134 5928	TR 2SA1037AK-T146-R		
	305 147 2218	TR 2SA1037AK-S-T146		
	305 173 9618	TR 2SA1235A1E		
	305 173 9717	TR 2SA1235A1F		
	405 220 3115	TR ISA1235AC1E		
	405 220 3016	TR ISA1235AC1F		
INTEGRATED CIRCUIT				
IC621	409 690 7918	IC FA5550N		
IC631	309 653 7405	IC MR4010-7101		
IC671	409 692 2515	IC TA76L431FB		
CAPACITOR				
C611	303 222 1326	CERAMIC	1000P K	1K
C612	303 222 1326	CERAMIC	1000P K	1K
C613	303 451 4119	MT-POLYEST	1U K	450V
C614	303 451 4119	MT-POLYEST	1U K	450V
C615	404 118 3609	ELECT	150U M	420V
C621	303 336 3510	CERAMIC	0.47U K	16V
	403 459 8017	CERAMIC	0.47U K	16V
	304 110 9800	CERAMIC	0.47U K	16V
C622	304 091 4504	CERAMIC	0.047U K	50V
C623	304 090 1207	CERAMIC	0.01U K	50V
C625	304 090 1207	CERAMIC	0.01U K	50V
C626	303 396 9613	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C627	304 091 3309	CERAMIC	2200P K	50V
C631	303 157 4215	CERAMIC	220P J	50V
C632	404 111 2401	CERAMIC	680P K	2K
C633	303 265 3216	CERAMIC	1000P J	50V
C634	304 091 3309	CERAMIC	2200P K	50V
C641	304 091 2609	CERAMIC	0.1U K	50V
C644	303 417 9912	CERAMIC	4.7U K	25V
C651	303 410 7113	ELECT	100U M	25V
C653	303 367 0410	CERAMIC	0.1U K	50V
	303 370 1510	CERAMIC	0.1U K	50V
C661	303 445 4405	ELECT	1800U M	25V
C662	303 367 0410	CERAMIC	0.1U K	50V
	304 091 2609	CERAMIC	0.1U K	50V
C663	303 367 0410	CERAMIC	0.1U K	50V
	304 091 2609	CERAMIC	0.1U K	50V
C664	303 429 6718	ELECT	1500U M	10V
C665	303 409 9913	ELECT	470U M	16V
C671	304 091 2609	CERAMIC	0.1U K	50V
C691	304 073 4508	CERAMIC	2200P K	250V
C692	304 073 4508	CERAMIC	2200P K	250V

Key No.	Part No.	Description		
RESISTOR				
R611	401 353 0311	MT-GLAZE	430K JA	1/3W
R612	401 353 0212	MT-GLAZE	360K JA	1/3W
R613	301 256 6314	MT-GLAZE	47K JA	1/10W
⚠R614	302 106 5508	RESISTER	0.075 KB	5W
R615	402 122 0409	MT-GLAZE	680K DD	1/4W
R616	402 122 0409	MT-GLAZE	680K DD	1/4W
R621	301 326 1812	MT-GLAZE	8.2K DA	1/10W
R622	301 309 8517	MT-GLAZE	330 DA	1/10W
R623	401 360 8010	MT-GLAZE	470 DA	1/10W
R624	301 162 2912	MT-GLAZE	220 JA	1/10W
R625	301 256 5614	MT-GLAZE	47 JA	1/10W
R626	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R627	301 150 5918	MT-GLAZE	10K JA	1/10W
R628	301 150 5918	MT-GLAZE	10K JA	1/10W
R629	301 255 7312	MT-GLAZE	510K JA	1/10W
R631	301 255 7718	MT-GLAZE	11K JA	1/10W
R633	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R634	301 256 1715	MT-GLAZE	33K JA	1/10W
R635	402 122 1802	OXIDE-MT	0.39JA	1W
	302 099 6308	OXIDE-MT	0.39JA	1W
R636	301 162 3018	MT-GLAZE	22K JA	1/10W
R641	301 150 5918	MT-GLAZE	10K JA	1/10W
R642	301 256 6611	MT-GLAZE	68K JA	1/10W
R643	301 150 5918	MT-GLAZE	10K JA	1/10W
R644	301 150 5918	MT-GLAZE	10K JA	1/10W
R646	301 256 7212	MT-GLAZE	18K JA	1/10W
R647	301 276 4710	MT-GLAZE	0.000 ZA	1/3W
R648	301 256 7212	MT-GLAZE	18K JA	1/10W
R651	301 150 5918	MT-GLAZE	10K JA	1/10W
R652	301 292 1915	MT-GLAZE	22 FA	1/2W
R662	301 152 3219	MT-GLAZE	330 JA	1/10W
R671	301 256 7618	MT-GLAZE	3.9K JA	1/10W
R672	301 150 6212	MT-GLAZE	1K JA	1/10W
R673	301 264 2919	MT-GLAZE	12K FA	1/10W
R674	301 264 9314	MT-GLAZE	3.3K FA	1/10W
R675	301 162 3711	MT-GLAZE	4.7K JA	1/10W
R676	301 264 2810	MT-GLAZE	1.2K FA	1/10W
R683	301 265 0211	MT-GLAZE	390 FA	1/10W
R684	301 264 9314	MT-GLAZE	3.3K FA	1/10W
TRANSFORMER				
⚠T651	645 097 6483	TRANS,POWER,PULSE		
COIL				
⚠L611	645 098 0473	LINE FILTER		
	652 003 1838	LINE FILTER		
⚠L612	945 084 0273	INDUCTOR,1400U		
	652 003 1821	INDUCTOR,1580UH		
L613	910 229 3532	CORE		
L614	910 229 3532	CORE		
L631	910 078 5954	PIPE CORE		
L661	910 229 3532	CORE		
L662	910 229 3532	CORE		
L663	945 041 1978	INDUCTOR,330 OHM		
DIODE				
D611	307 191 3903	DIODE FML-G16S		
D611D	645 098 1715	CORE,FERRITE		
D611E	645 098 1715	CORE,FERRITE		
D613	307 163 0414	DIODE 1SS352-(TPH3)		
	307 149 0810	DIODE 1SS355-TE-17		
D631	307 163 0414	DIODE 1SS352-(TPH3)		
	307 149 0810	DIODE 1SS355-TE-17		
D632	307 247 8827	DIODE RF101L2S		
D633	307 146 8116	DIODE EG01C		
D651	307 247 8827	DIODE RF101L2S		
D661	407 261 9504	DIODE	YG862C10R	

Electrical Parts List

Key No.	Part No.	Description		
D662	307 222 9607	DIODE FMB-2306		
	307 202 9801	DIODE FMB-26L		
	307 253 7504	DIODE RB085T-60		
	307 250 2403	DIODE RB225T-60		
D663	307 247 8827	DIODE RF101L2S		
	307 190 4119	DIODE SFPL-52V		
D664	307 210 5416	DIODE RB551V-30-TE-17		
DB611	307 202 7708	DIODE D10XB60		
MISCELLANEOUS				
⚠ F631	324 006 1305	FUSE	250V	2.5A
Q611F	645 098 1715	CORE,FERRITE		
⚠ PC661	307 223 7315	PC TLP421F(D4-GB-TP4)		
	307 223 8312	PC TLP421F(D4-GR-TP4)		
	407 265 7813	PC TLP781F(D4-GB-TP7)		
⚠ PC663	307 223 7315	PC TLP421F(D4-GB-TP4)		
	307 223 8312	PC TLP421F(D4-GR-TP4)		
	407 265 7813	PC TLP781F(D4-GB-TP7)		
⚠ PC671	307 223 7315	PC TLP421F(D4-GB-TP4)		
	307 223 8312	PC TLP421F(D4-GR-TP4)		
	407 265 7813	PC TLP781F(D4-GB-TP7)		
PTH611	308 037 5501	THERMISTOR NTPDB5R0LDHB0		
PTH641	408 062 4606	TH PRF18BD471QB1RB		
ZD631	307 206 5413	ZD UDZS-TE-178.2B		

A602 655 003 6872 ASSY,PWB,FILTER KJ8AC

Key No.	Part No.	Description		
CAPACITOR				
⚠ C601	404 117 6403	MT-POLYEST	1U K	275V
	404 117 8902	MT-POLYEST	1U K	310V
⚠ C602	404 117 6403	MT-POLYEST	1U K	275V
	404 117 8902	MT-POLYEST	1U K	310V
⚠ C603	304 073 3907	CERAMIC	1000P K	250V
⚠ C604	304 073 3907	CERAMIC	1000P K	250V
RESISTOR				
⚠ R601	301 287 5416	MT-GLAZE	200K JA	1W
⚠ R602	301 287 5416	MT-GLAZE	200K JA	1W
VARIABLE RESISTOR				
⚠ VA601	408 066 1700	VD TND14SE471KB0SLAA0		
COIL				
⚠ L601	652 003 1845	LINE FILTER		
⚠ LF601	645 093 1765	SOCKET,INLET AC 3P		
MISCELLANEOUS				
⚠ F601	423 034 4101	FUSE	250V	6.3A
	323 021 7804	FUSE	250V	6.3A

A603 655 003 6865 ASSY,PWB,R/C KJ8AC

Key No.	Part No.	Description		
CAPACITOR				
C2901	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C2902	303 215 1019	CERAMIC	470P J	50V
	304 094 8707	CERAMIC	470P J	50V
C2903	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
RESISTOR				
R2901	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
	301 105 7912	MT-GLAZE	0.000 ZA	1/16W
R2903	301 255 6513	MT-GLAZE	100 JA	1/10W
	301 105 0418	MT-GLAZE	100 JA	1/16W
MISCELLANEOUS				
A2901	652 002 3352	UNIT,REMOCON,RECEIVER		

A604 655 003 6858 ASSY,PWB,TEMP. SENSOR A KJ8AC

Key No.	Part No.	Description		
CAPACITOR				
C8833	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
RESISTOR				
R8856	301 162 2219	MT-GLAZE	10 JA	1/10W
	301 105 0319	MT-GLAZE	10 JA	1/16W
R8857	301 162 2219	MT-GLAZE	10 JA	1/10W
	301 105 0319	MT-GLAZE	10 JA	1/16W

A605 655 003 6841 ASSY,PWB,TEMP. SENSOR C KJ8AC

Key No.	Part No.	Description		
CAPACITOR				
C8813	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
RESISTOR				
R8812	301 162 2219	MT-GLAZE	10 JA	1/10W
	301 105 0319	MT-GLAZE	10 JA	1/16W
R8813	301 162 2219	MT-GLAZE	10 JA	1/10W
	301 105 0319	MT-GLAZE	10 JA	1/16W

A2000 655 003 6971 ASSY,PWB,KEY_SW KJ8AC

Key No.	Part No.	Description		
R6801	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R6806	301 224 9217	MT-GLAZE	15K JA	1/16W
R6807	301 234 9917	MT-GLAZE	6.8K JA	1/16W
R6808	301 225 1517	MT-GLAZE	3.9K JA	1/16W
R6809	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R6811	301 225 1517	MT-GLAZE	3.9K JA	1/16W
MISCELLANEOUS				
SW6801	945 026 2792	SWITCH,PUSH 1P-1TX1		
	952 001 8830	SWITCH,PUSH	1P-1TX1	
SW6803	945 026 2792	SWITCH,PUSH 1P-1TX1		
	952 001 8830	SWITCH,PUSH	1P-1TX1	
SW6804	945 026 2792	SWITCH,PUSH 1P-1TX1		
	952 001 8830	SWITCH,PUSH	1P-1TX1	
SW6806	945 026 2792	SWITCH,PUSH 1P-1TX1		
	952 001 8830	SWITCH,PUSH	1P-1TX1	
SW6807	945 026 2792	SWITCH,PUSH 1P-1TX1		
	952 001 8830	SWITCH,PUSH	1P-1TX1	
SW6808	945 026 2792	SWITCH,PUSH 1P-1TX1		
	952 001 8830	SWITCH,PUSH	1P-1TX1	
SW6809	945 026 2792	SWITCH,PUSH 1P-1TX1		
	952 001 8830	SWITCH,PUSH	1P-1TX1	
SW6810	945 026 2792	SWITCH,PUSH 1P-1TX1		
	952 001 8830	SWITCH,PUSH	1P-1TX1	
SW6811	945 026 2792	SWITCH,PUSH 1P-1TX1		
	952 001 8830	SWITCH,PUSH	1P-1TX1	

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description

(KJ8AC) May / 2010 DC 200 Printed in Japan

SANYO Electric Co., Ltd.

Diagrams & Drawings

Schematic Diagrams
Printed Wiring Board Drawings

Model	Chassis No.
PLC-WL2500	KJ8-WL250000
PLC-WL2501	KJ8-WL250100

These schematic diagrams and printed wiring board drawings are part of the service manual original for chassis No. KJ8-WL250000 / KJ8-WL250100 models PLC-WL2500 / PLC-WL2501.
File with the service manual No. SM5111262-00

Note:
All the information of part numbers and values indicated on these diagrams are at the beginning of production. To improve the performance, there may be some differences to the actual set. When you order the service parts, use service parts code mentioned on the parts list in this service manual.

Parts description and reading in schematic diagram

1. The parts specification of resistors, capacitors and coils are expressed in designated code. Please check the parts description by the following code table.
2. Some of transistors and diodes are indicated in mark for the substitution of parts name. Please check the parts name by the following code table.
3. Voltages and waveforms were taken with a video color bar signal (1Vp-p at 75 ohms terminated) and controls to normal.
4. Voltages were taken with a high-impedance digital voltmeter.

Capacitor Reading

Example 2000 K K 1000 BG

Example 160 E M 10

- BG — Characteristic
- 1000 / 10 — Capacitance value: Excepting electric capacitors, all capacitance values of less than 1 are expressed in μF and more than 1 are in pF.
- K / M — Tolerance
- K / E — Type
- 2000 / 160 — Rated voltage

● Material table

Mark	Material
E	Electrolytic
P	Electrolytic (non-polarized)
C	Ceramic (temperature compensation)
K	Ceramic
F	Polyester
N	Polypropylene
M	Metalized polypropylene
H	Metalized polypromylar
B	Ceramic (semiconductor)
G	Metalized polyestel
Y	Composite film
S	Styrol
T	Tantalum oxide solid electrolytic
U	Organic semiconductive electrolyte
D	Electric double layer electrolytic

● Tolerance table

Mark	Tolerance	
A	not specified	
B	±0.1	
C	±0.25	
D	±0.5	
F	±1	
G	±2	
E	±2.5	
H	±3	
J	±5	
K	±10	
M	±20	
N	±30	
P	+100	-0
Q	+30	-10
T	+50	-10
U	+75	-10
V	+20	-10
W	+100	-10
X	+40	-20
Y	+150	-10
Z	+80	-20

Coil Reading

Example L2 C1 4R7 K N

- K — Tolerance
- 4R7 — Inductance value
- C1 — Manufacture code
- L2 — Unique code

Mark	Tolerance (nH)	Mark	Tolerance (%)
C	±0.25	G	±2
D	±0.5	J	±5
S	±0.3	K	±10
A	±0.2	L	±15
		M	±20

Resistor Reading

Example 1/2 D J 10K B

Example 6 W K 8.2

Example 1/2 C K 1M

- B — Characteristic: Z (Carbon fuse), B (Non-burnable)
- 10K / 8.2 / 1M — Resistance value: K indicates in KΩ, M indicate in MΩ
- J / K / K — Tolerance (see below table)
- D / W / C — Material (see below table)
- 1/2 / 6 / 1/2 — Rated wattage (W)

Note: Resistor which is indicated with resistance value only are 1/6W carbon resistor. Resistor which is indicated with material, tolerance and value are 1/4W rated wattage.

● Material table

Mark	Material
D	Carbon
N	Metal film
S	Oxide metal film
C	Solid
G	Metal glaze
W	Wire wounding or cement
H	Ceramic
F	Fusible

● Tolerance table

Mark	Tolerance
A	±0.05
B	±0.1
C	±0.25
D	±0.5
F	±1
G	±2
J	±5
K	±10
M	±20
P	+5 -15
Z	used in 0 ohm

Diode/Transistor Type Reading

● Diode

Mark	Type number
R	1S2076A,1S2473,1N4148
AA	1S2076A,1S2473,1SS133,1N4148

● Transistor

(1) NPN type

Mark	Type number				
--	2SC536	2SC945A	2SC1815	2SC1740S	
AD	NF, NG	PA, QA	Y, GR	Q, R, S	
AE	NF, NG	PA, QA, RA	O, Y, GR	Q, R, S	

(2) PNP type

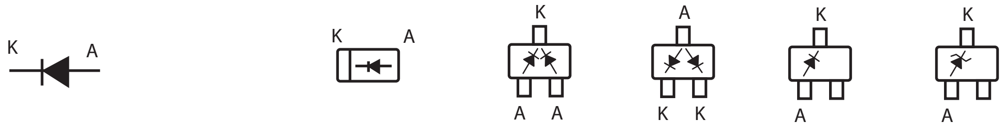
Mark	Type number				
--	2SA608	2SA564A	2SA1015	2SA933S	
AB	NF	R	Y, GR	R	
AC	NF	Q, R	O, Y, GR	Q, R	

(3) Chip type

Mark	Type number				
--	2SA1179N	2SA1037K	2SA1037AK	2SC2812/N	2SC2412K
AJ	M6, M7	R, S	R, S		
AH				L6, L7	R, S

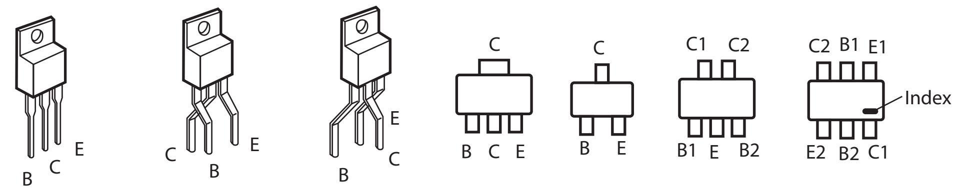
Pin description of diode, transistor and IC

● Diode



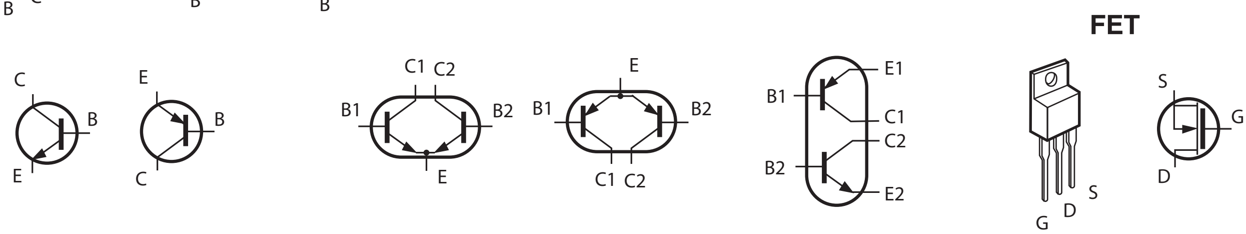
K: Cathode
A: Anode

● Transistor/FET

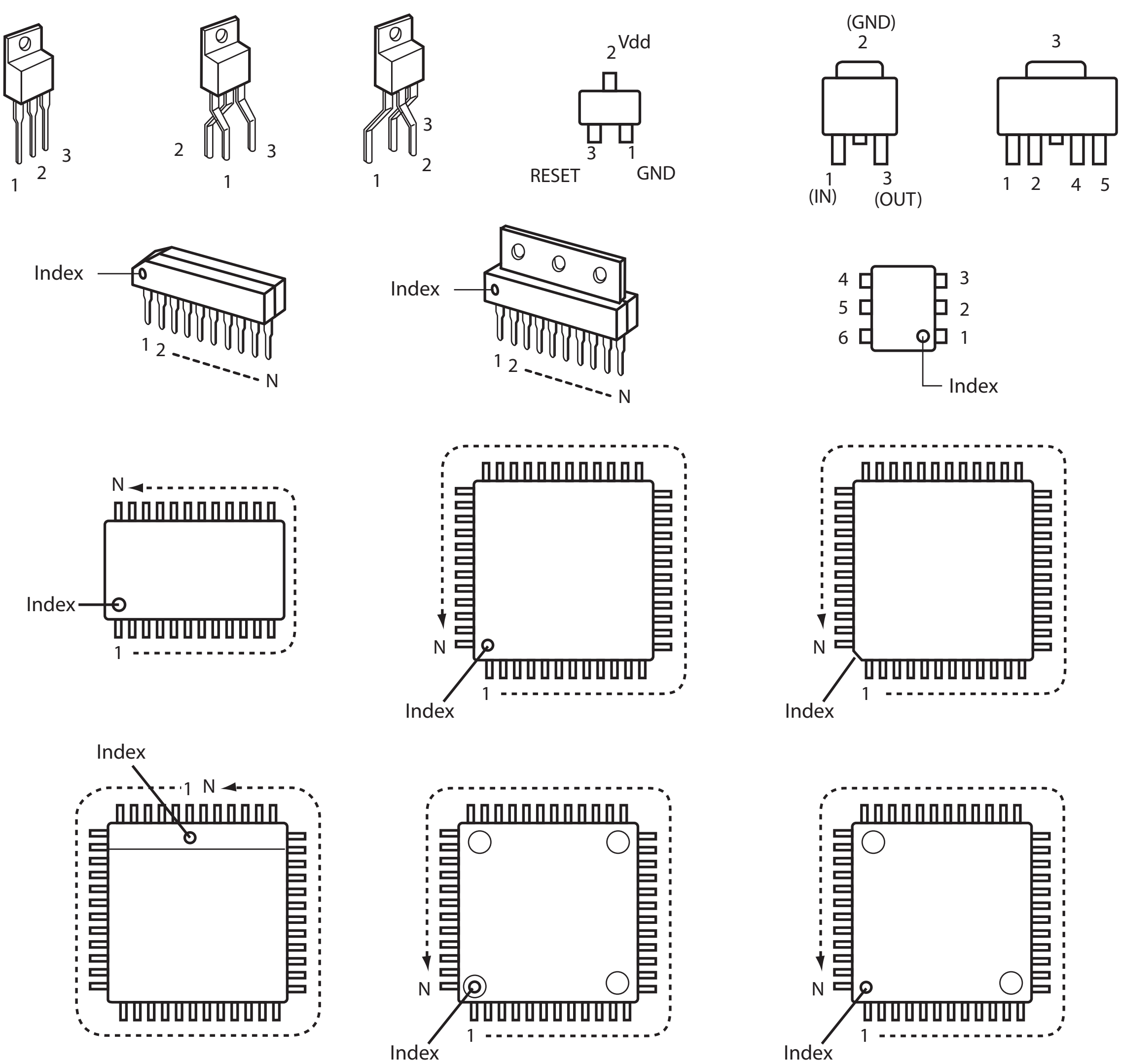


C: Collector
B: Base
E: Emitter

D: Drain
G: Gate
S: Source



● IC



Note on Soldering

Do not use solder containing lead.

This product has been manufactured using lead-free solder in order to help preserve the environment.

Because of this, be sure to use lead-free solder when carrying out repair work, and never use solder containing lead.

Lead-free solder has a melting point that is 30–40 °C (86–104 °F) higher than solder containing lead, and moreover it does not contain lead which attaches easily to other metals. As a result, it does not melt as easily as solder containing lead, and soldering will be more difficult even if the temperature of the soldering iron is increased.

The extra difficulty in soldering means that soldering time will increase and damage to the components or the circuit board may easily occur.

Because of this, you should use a soldering iron and solder that satisfy the following conditions when carrying out repair work. Also, soldering work must be done in a short time.

Soldering iron

Use a soldering iron which is 70 W or equivalent, and which lets you adjust the tip temperature up to 450 °C (842 °F) It should also have as good temperature recovery characteristics as possible.

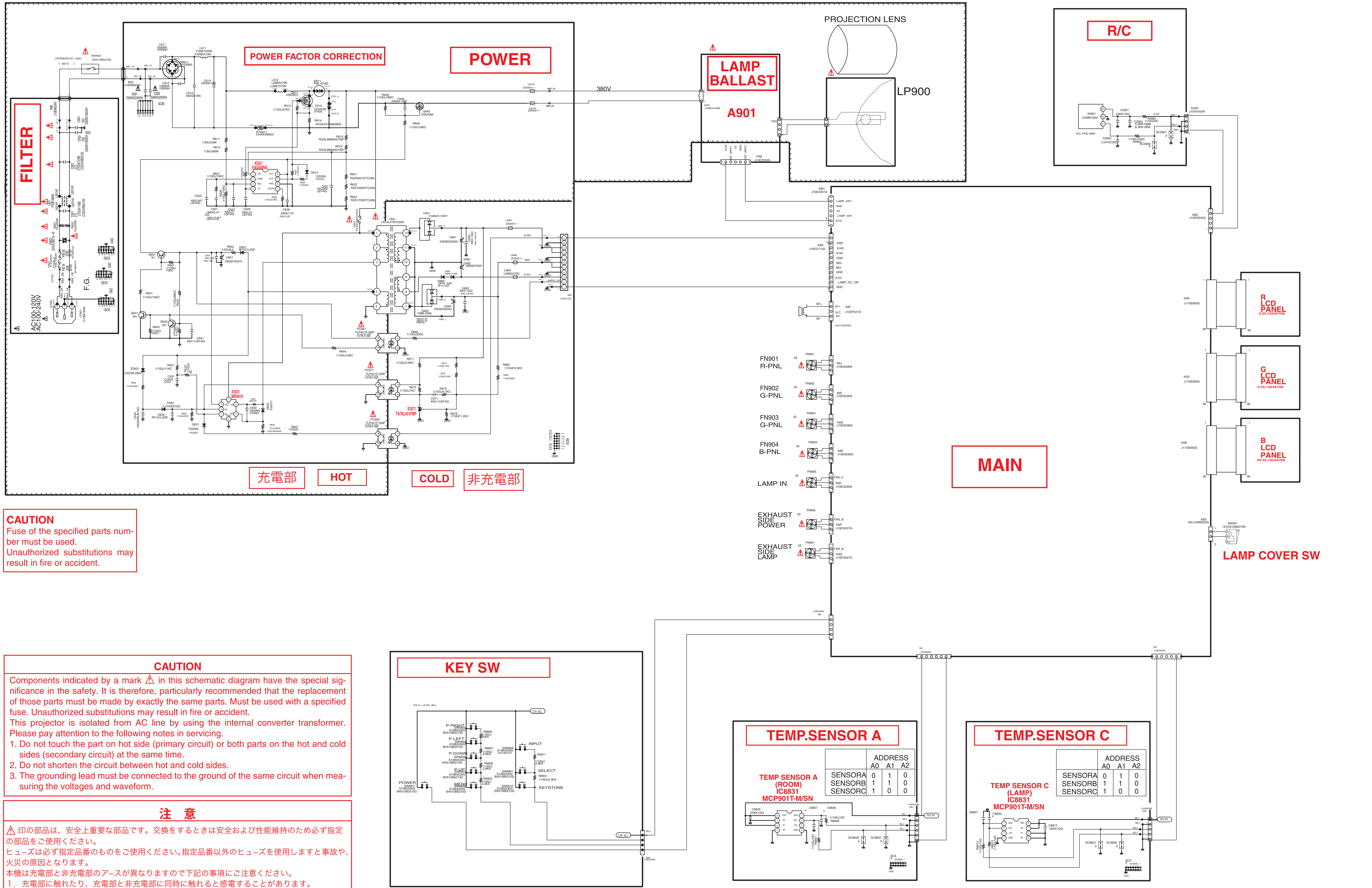
Solder

Use solder with the metal content and composition ratio by weight given in the table below. Do not use solders which do not meet these conditions.

Metal content	Tin (Sn)	Silver (Ag)	Copper (Cu)
Composition ratio by weight	96.5 %	3.0 %	0.5 %

Note:

If replacing existing solder containing lead with lead-free solder in the soldered parts of products that have been manufactured up until now, remove all of the existing solder at those parts before applying the lead-free solder.



	ADDRESS		
	A0	A1	A2
SENSORA	0	1	0
SENSORB	1	1	0
SENSORC	1	0	0

	ADDRESS		
	A0	A1	A2
SENSORA	0	1	0
SENSORB	1	1	0
SENSORC	1	0	0

CAUTION
Fuse of the specified parts number must be used.
Unauthorized substitutions may result in fire or accident.

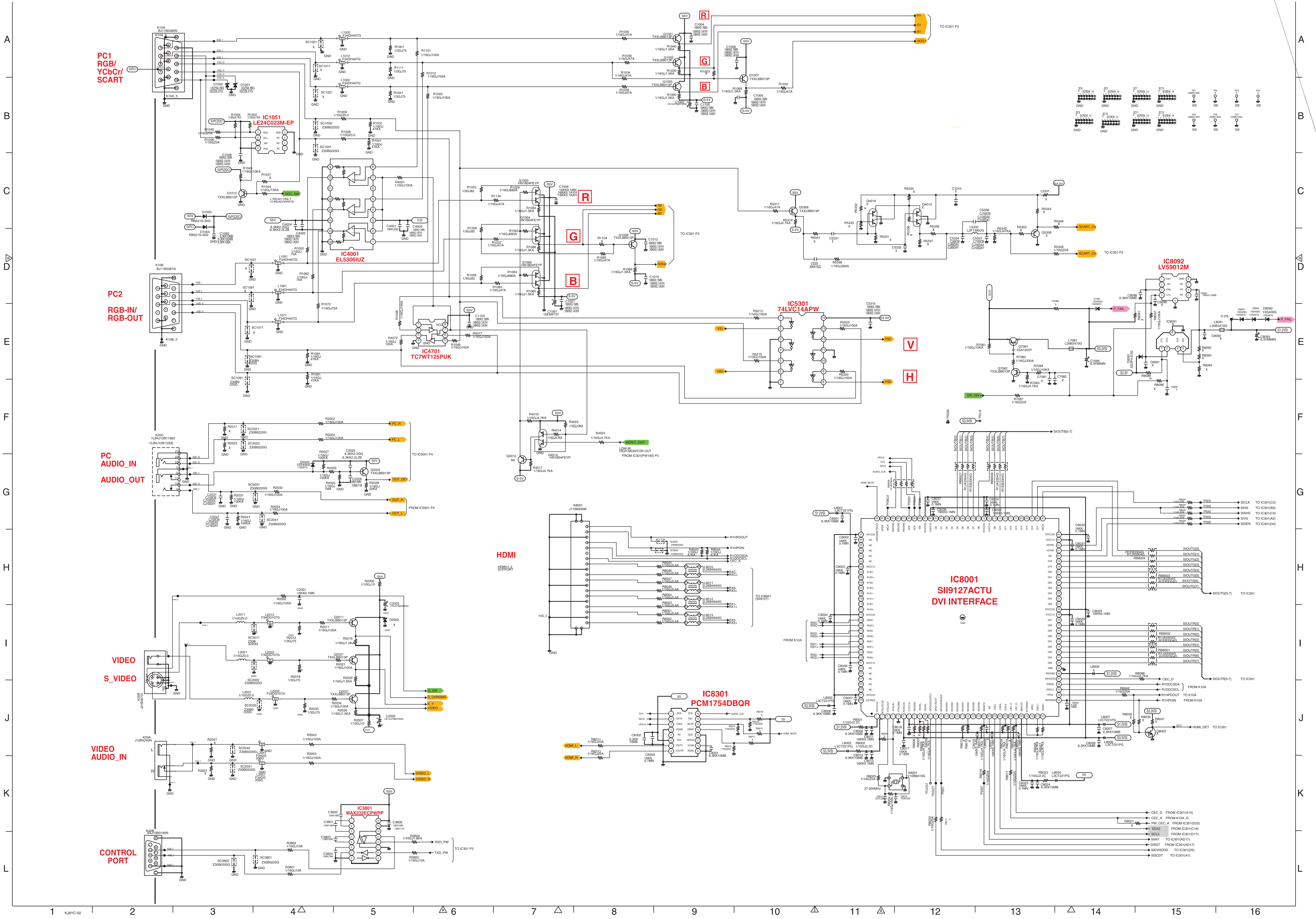
CAUTION

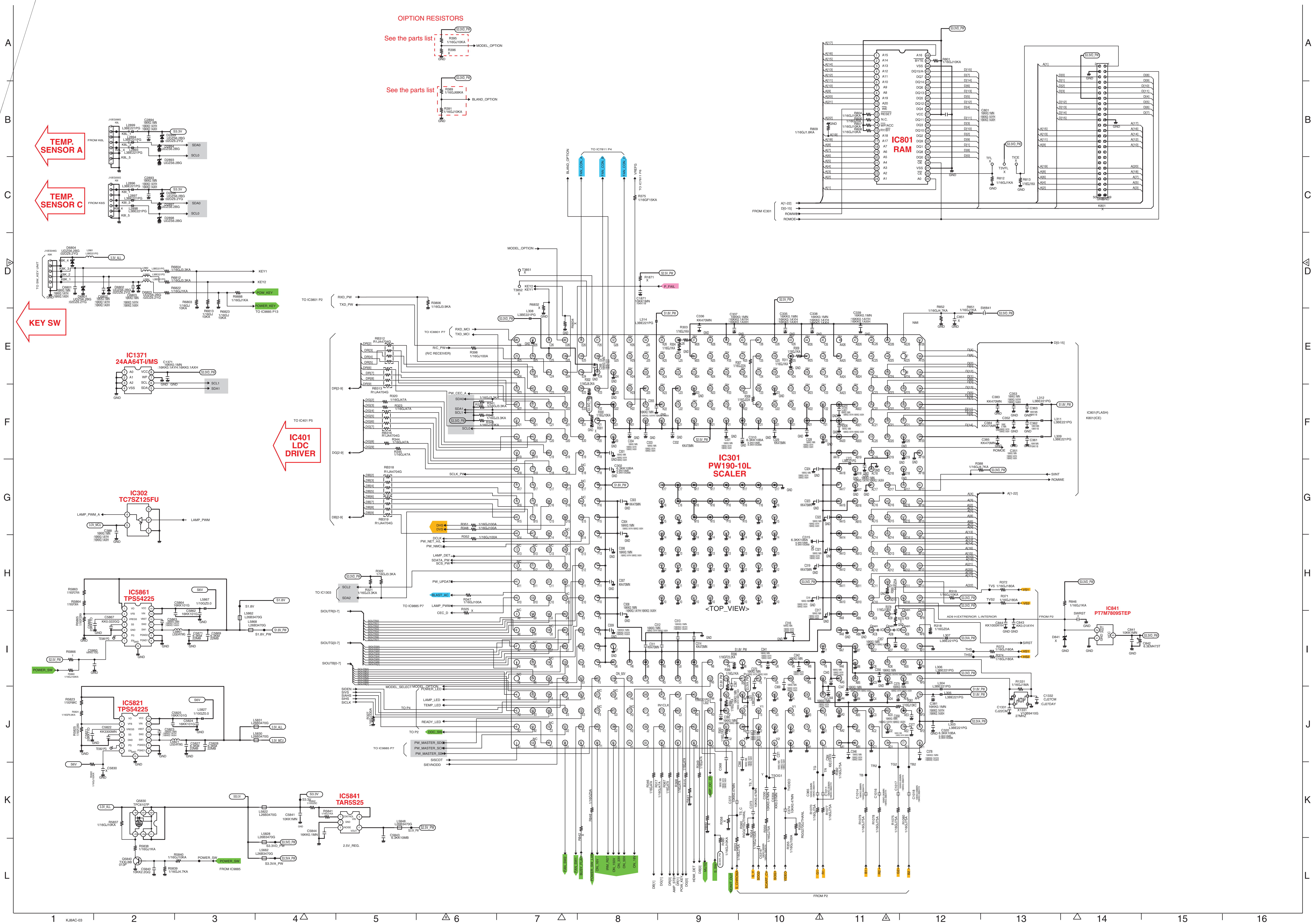
Components indicated by a mark ⚠ in this schematic diagram have the special significance in the safety. It is therefore, particularly recommended that the replacement of those parts must be made by exactly the same parts. Must be used with a specified fuse. Unauthorized substitutions may result in fire or accident.
This projector is isolated from AC line by using the internal converter transformer. Please pay attention to the following notes in servicing.
1. Do not touch the part on hot side (primary circuit) or both parts on the hot and cold sides (secondary circuit) at the same time.
2. Do not shorten the circuit between hot and cold sides.
3. The grounding lead must be connected to the ground of the same circuit when measuring the voltages and waveform.

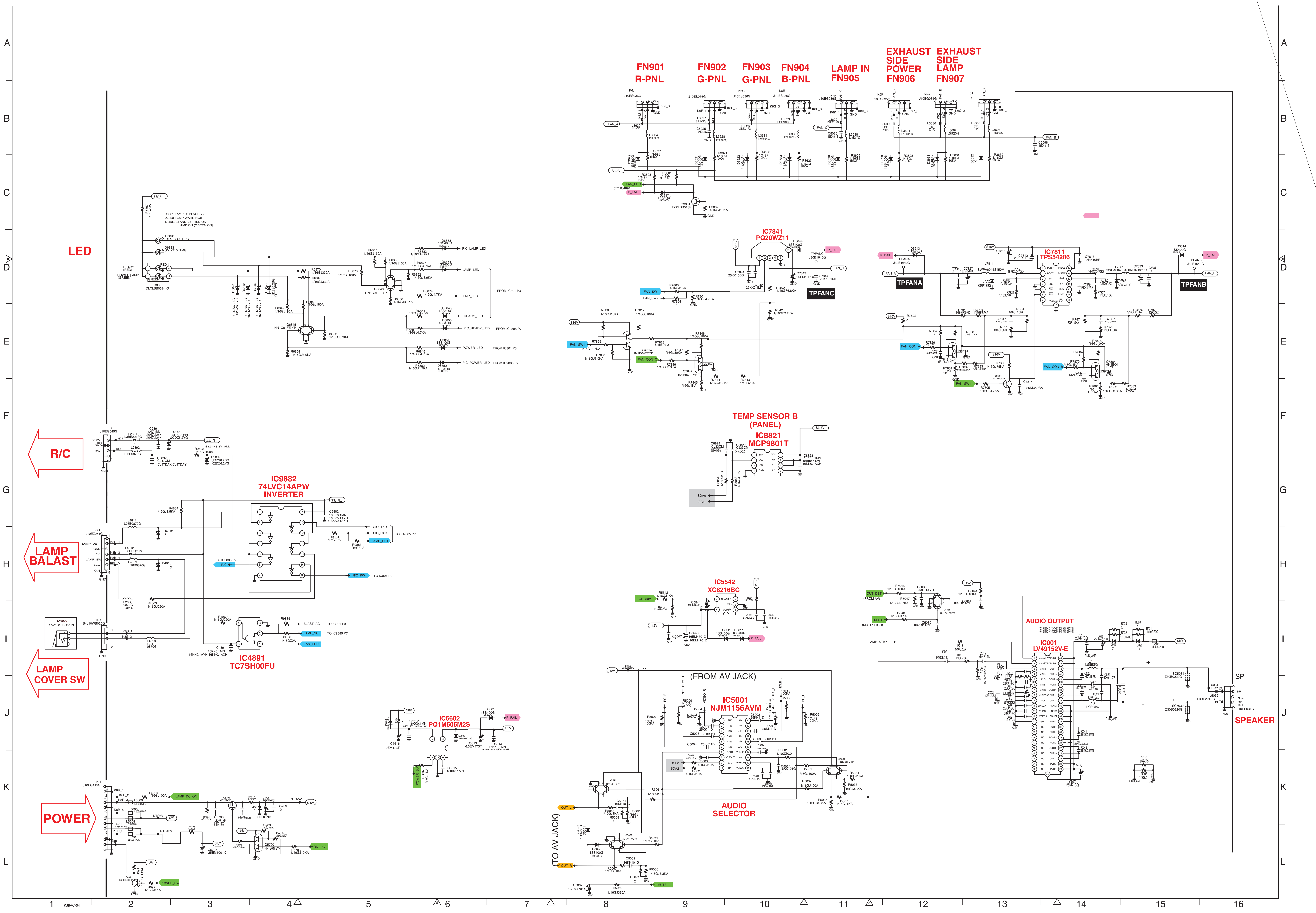
注　意

⚠ 印の部品は、安全上重要な部品です。交換をするときは安全および性能維持のため必ず指定の部品をご使用ください。
ヒューズは必ず指定品番のものをご使用ください。指定品番以外のヒューズを使用しますと事故や、火災の原因となります。
本機は充電部と非充電部のアースが異なりますので下記の事項にご注意ください。
1．充電部に触れたり、充電部と非充電部に同時に触れると感電することがあります。
2．充電部、非充電部の間を短絡しないでください。故障の原因になります。
3．測定器をつなぐ際、アースは測定点と同じ回路のアースから取ってください。

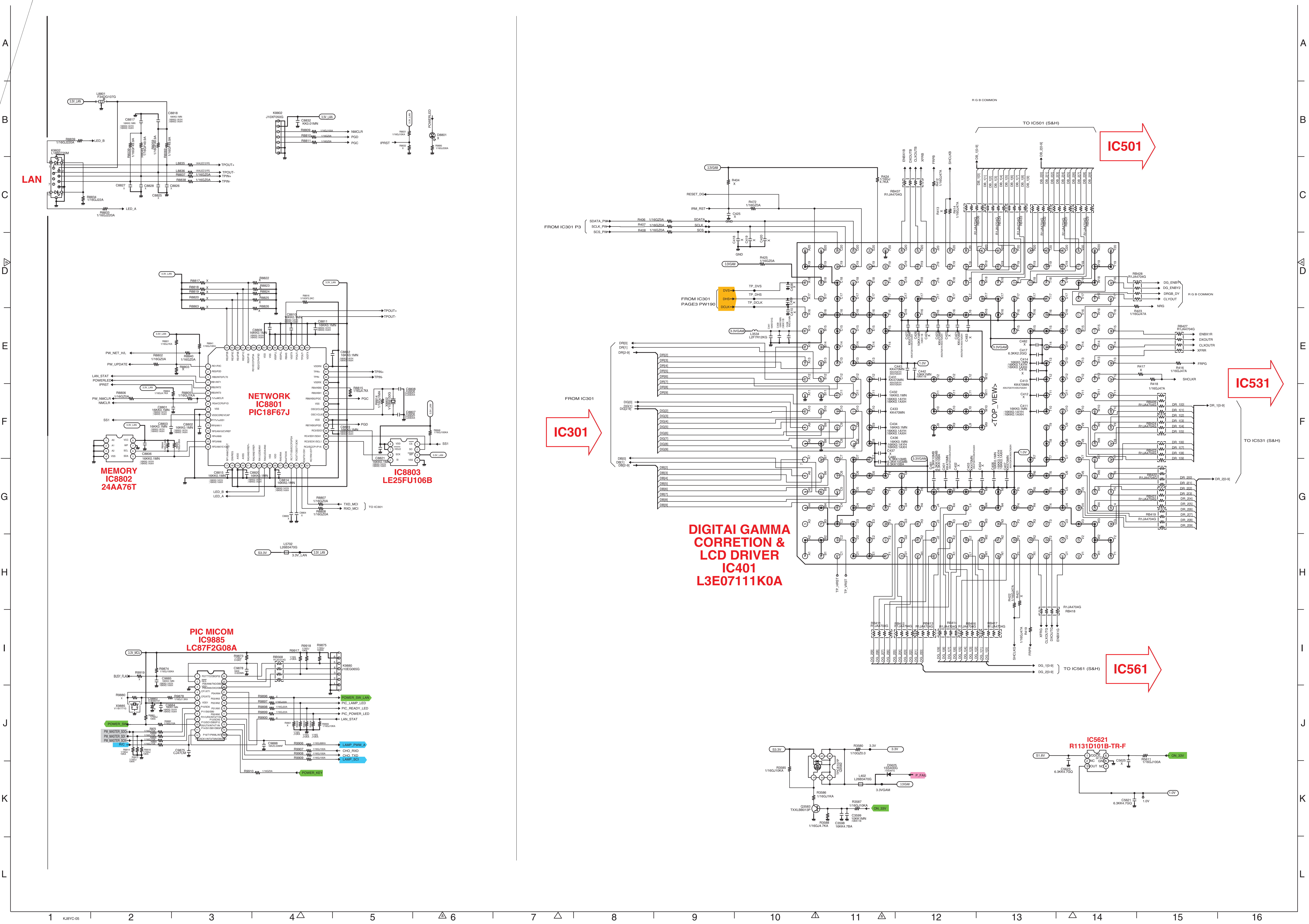
* WL2501 series dose not provide KEY SW board and its surrounding circuit.

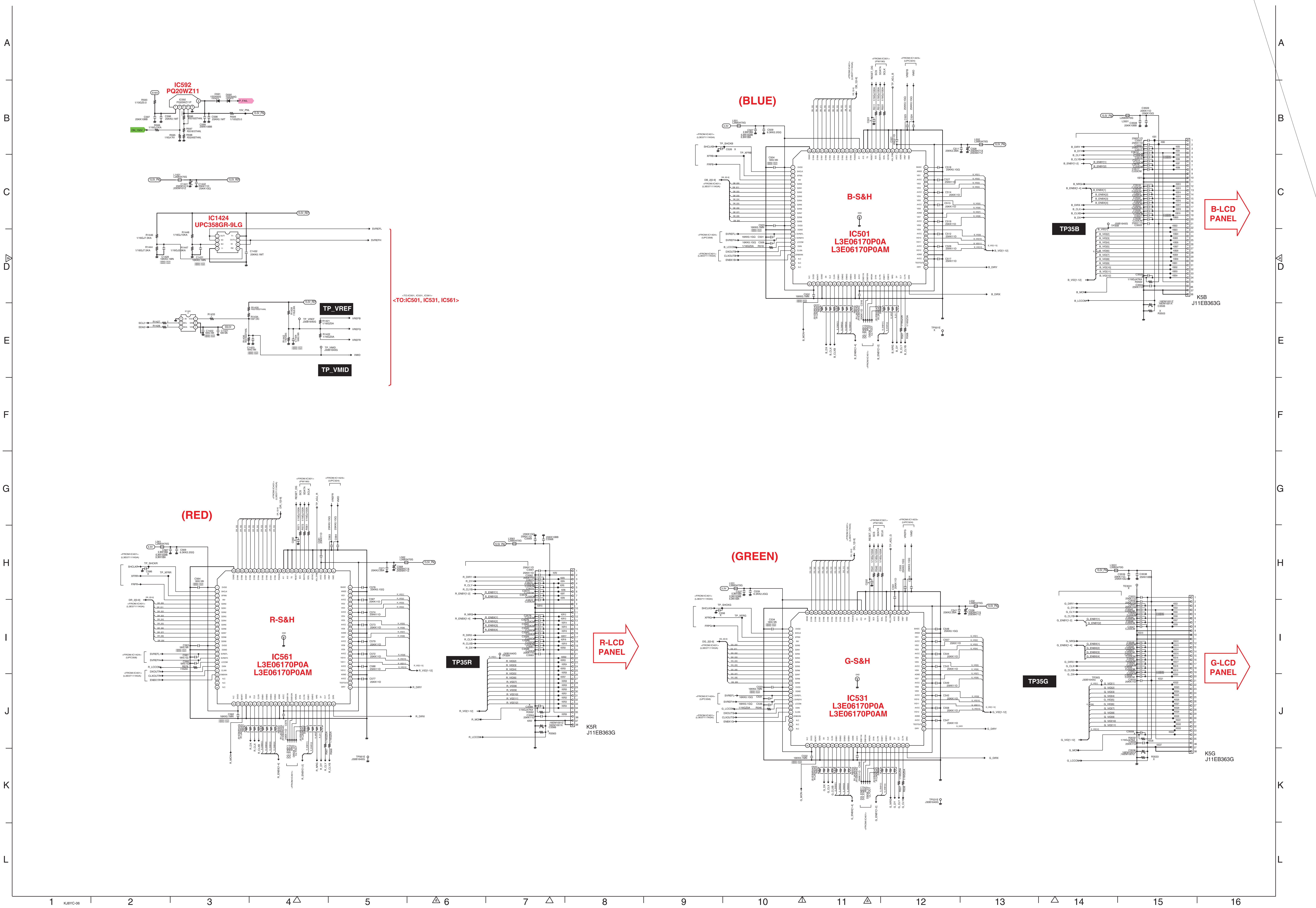

PC1
RGB/
YCbCr/
SCART
IC1051
LE24C023M-EP
IC4001
EL5306IUZ
PC2
RGB-IN/
RGB-OUT
IC4701
TC7WT125PUK
IC5301
74LVC14APW
IC8092
LV59012M
TO IC301 P3
PC
AUDIO_IN
AUDIO_OUT
HDMI
IC8001
SII9127ACTU
DVI INTERFACE
VIDEO
S_VIDEO
VIDEO
AUDIO_IN
IC8301
PCM1754DBQR
IC3801
MAX232ECPWRP
CONTROL
PORT
KJ8YC-02


OIPTION RESISTORS
See the parts list
See the parts list
TEMP. SENSOR A
TEMP. SENSOR C
KEY SW
IC1371
24AA64T-I/MS
IC302
TC7SZ125FU
IC5861
TPS54225
IC5821
TPS54225
IC5841
TAR5S25
IC401
LDC
DRIVER
IC301
PW190-10L
SCALER
<TOP_VIEW>
IC801
RAM
IC841
PT7M7809STEP



FN901
R-PNL
FN902
G-PNL
FN903
G-PNL
FN904
B-PNL
LAMP IN
FN905
EXHAUST
SIDE
POWER
FN906
EXHAUST
SIDE
LAMP
FN907
LED
IC7841
PQ20WZ11
IC7811
TPS54286
TPFANA
TPFANB
TPFANC
R/C
IC9882
74LVC14APW
INVERTER
LAMP
BALAST
TEMP SENSOR B
(PANEL)
IC8821
MCP9801T
IC5542
XC6216BC
IC4891
TC7SH00FU
LAMP
COVER SW
AUDIO OUTPUT
IC001
LV49152V-E
(FROM AV JACK)
IC5001
NJM1156AVM
IC5602
PQ1M505M2S
SPEAKER
AUDIO
SELECTOR
POWER
(TO AV JACK)


LAN
NETWORK
IC8801
PIC18F67J
MEMORY
IC8802
24AA76T
IC8803
LE25FU106B
PIC MICOM
IC9885
LC87F2G08A
R G B COMMON
TO IC501 (S&H)
IC501
FROM IC301 P3
FROM IC301
PAGE3 PW190
FROM IC301
IC301
IC531
TO IC531 (S&H)
<TOP_VIEW>
DIGITAI GAMMA
CORRETION &
LCD DRIVER
IC401
L3E07111K0A
TO IC561 (S&H)
IC561
IC5621
R1131D101B-TR-F


IC592
PQ20WZ11
IC1424
UPC358GR-9LG
TP_VREF
TP_VMID
<TO:IC501, IC531, IC561>
(BLUE)
B-S&H
IC501
L3E06170P0A
L3E06170P0AM
TP35B
B-LCD PANEL
K5B
J11EB363G
(RED)
R-S&H
IC561
L3E06170P0A
L3E06170P0AM
TP35R
R-LCD PANEL
K5R
J11EB363G
(GREEN)
G-S&H
IC531
L3E06170P0A
L3E06170P0AM
TP35G
G-LCD PANEL
K5G
J11EB363G
KJ8YC-06

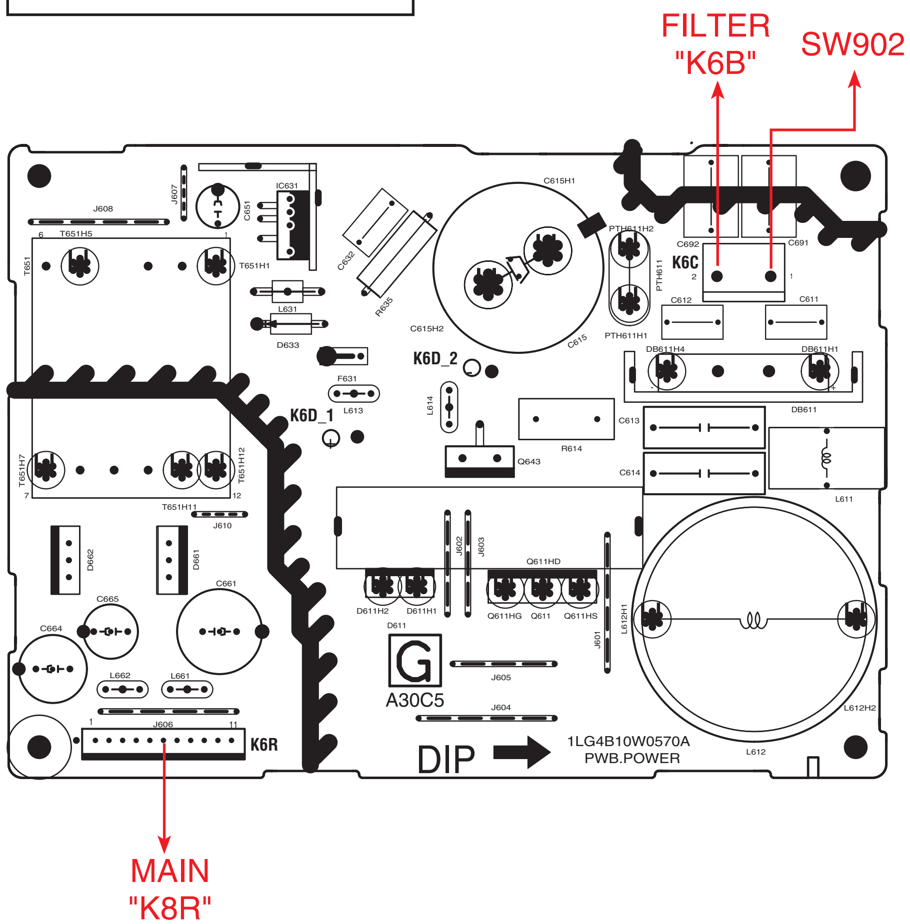
Printed Wiring Board Diagrams

⚠ CAUTION

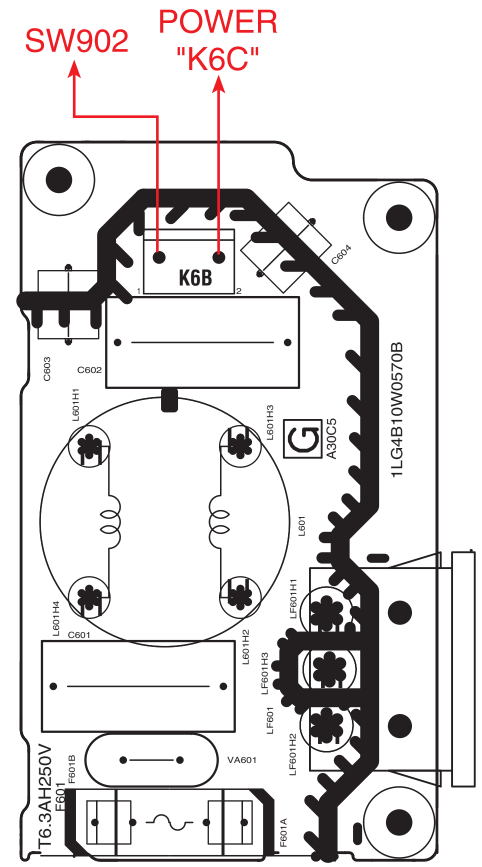
This projector is isolated from AC line by using the internal converter transformer.
Please pay attention to the following notes in servicing

1. Do not touch the part on hot side (primary circuit) or both parts on hot and cold sides (secondary circuit) at the same time.
2. Do not shorten the circuit between hot and cold sides.
3. The grounding lead must be connected to the ground of the same circuit when measuring of voltages and waveforms.

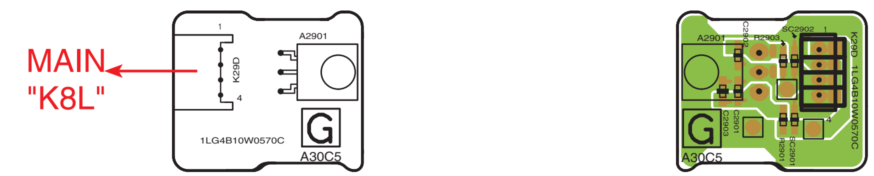
POWER (SIDE:A)



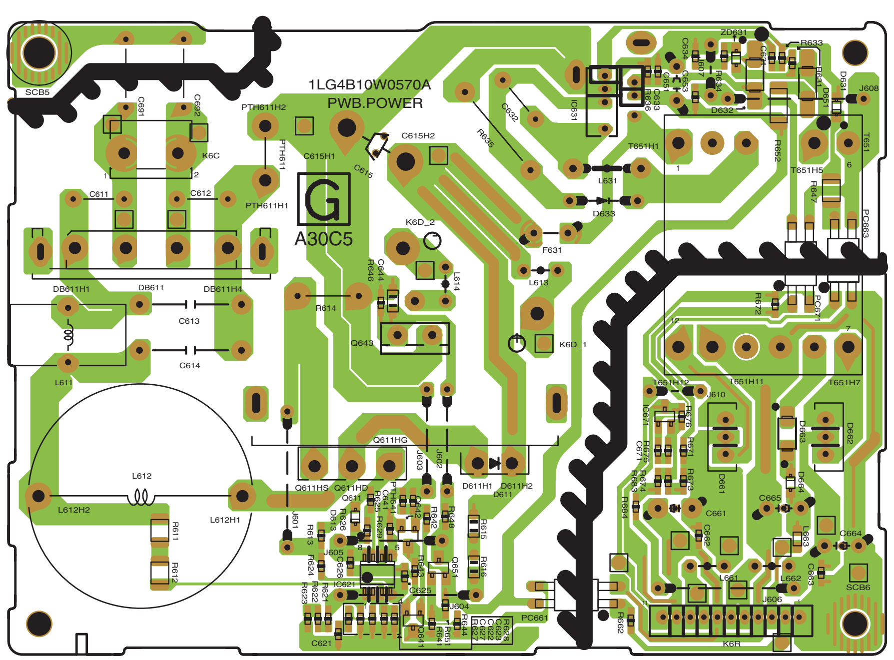
FILTER (SIDE:A)



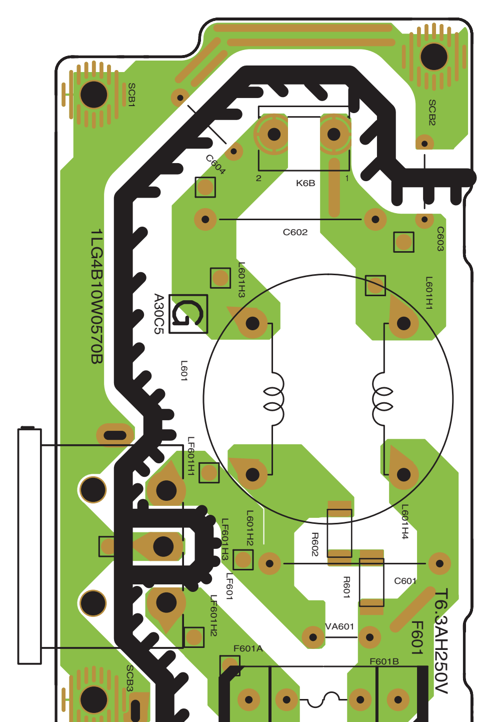
R/C



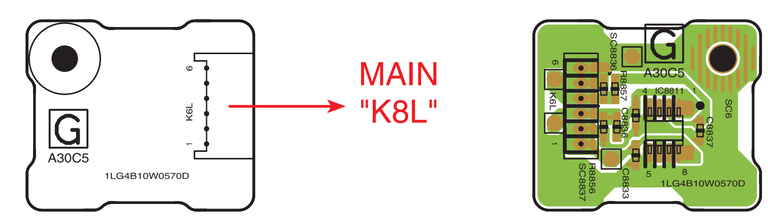
POWER (SIDE:B)



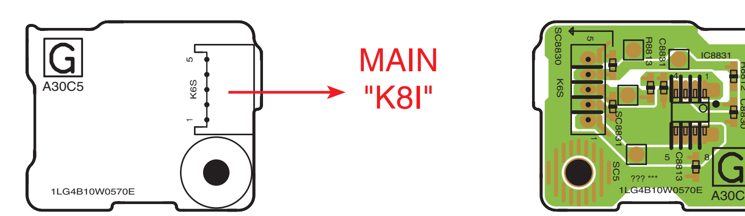
FILTER (SIDE:B)

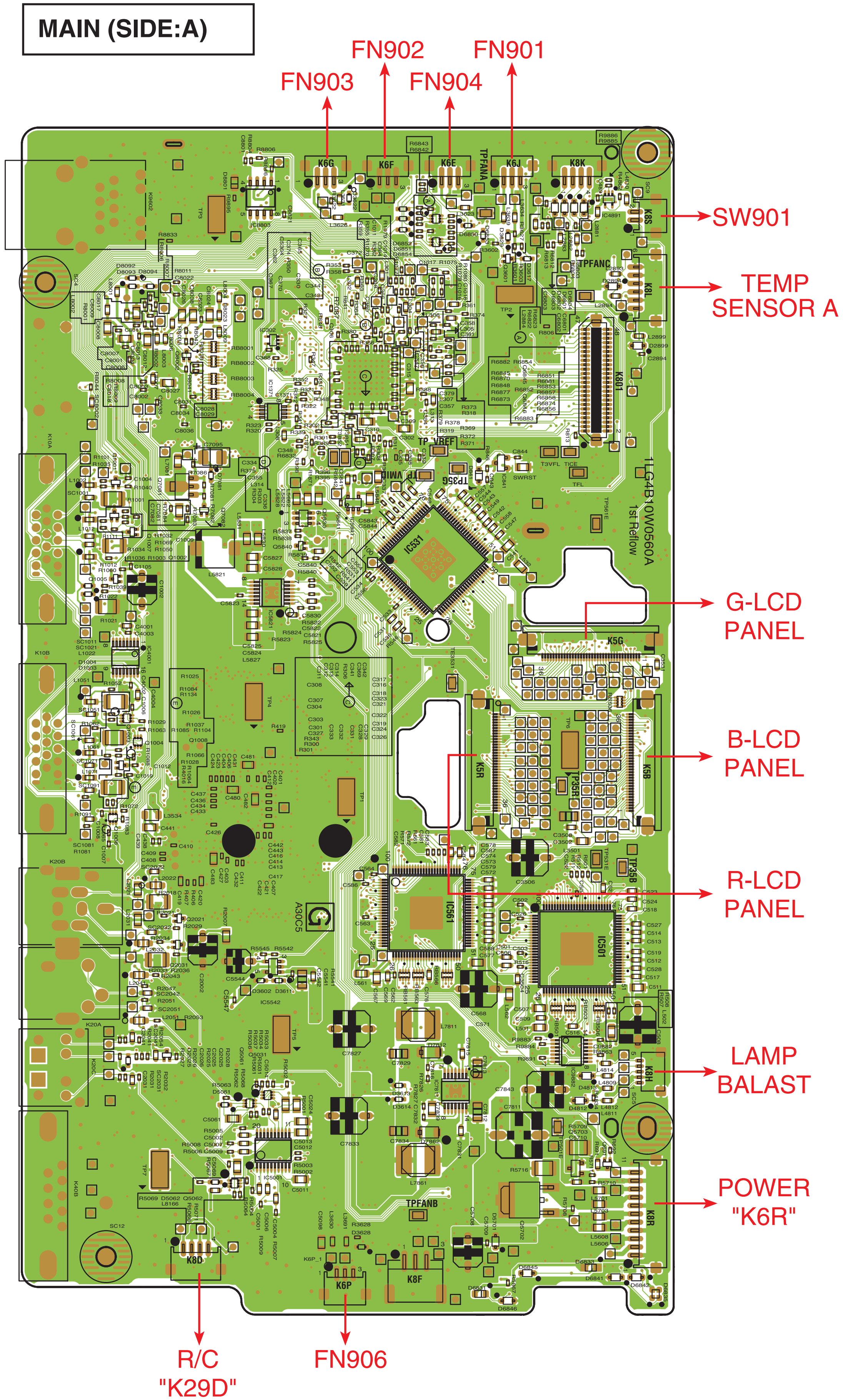


TEMP. SENSOR A

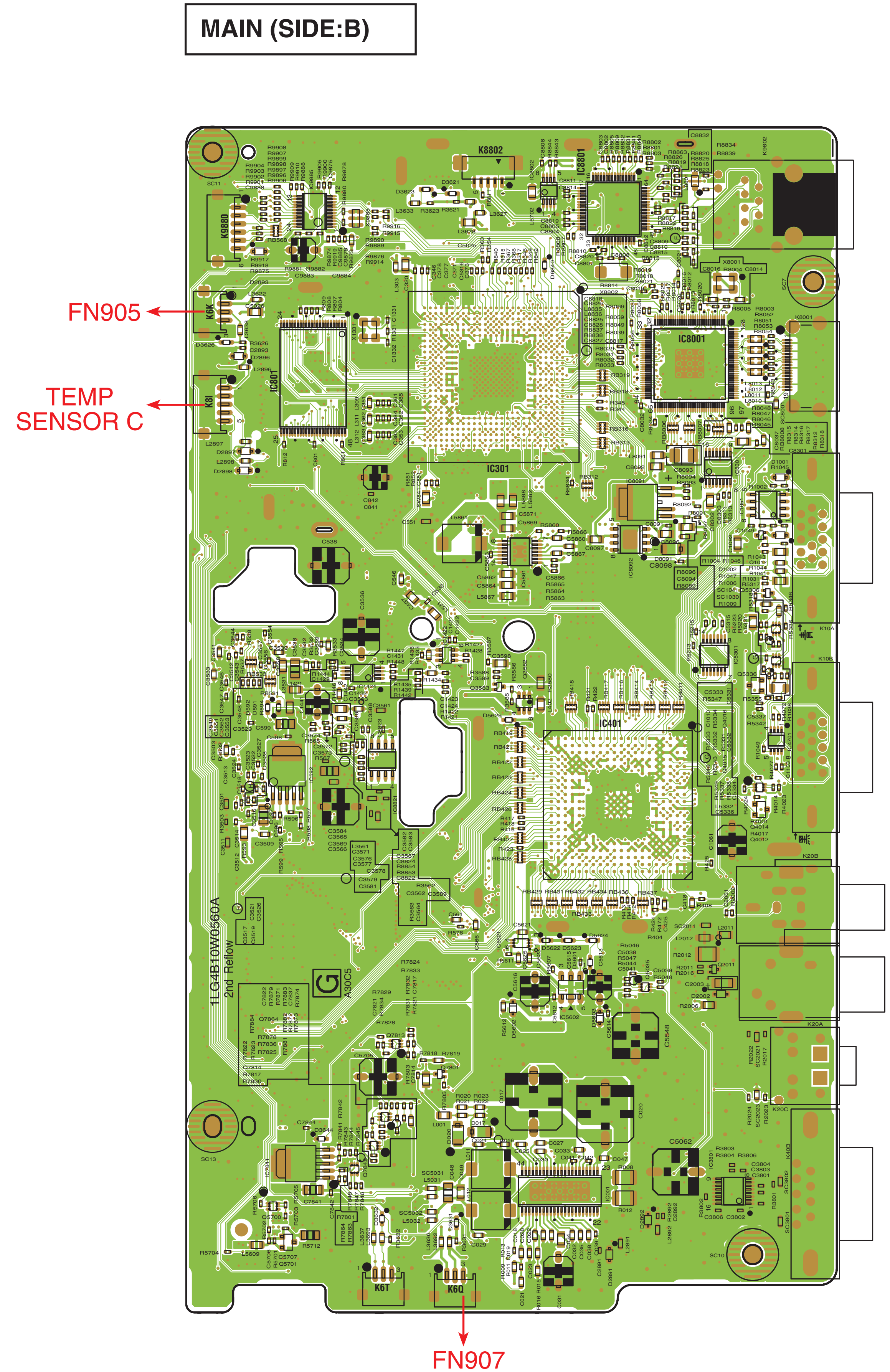


TEMP. SENSOR C





MAIN (SIDE:A)
FN902
FN901
FN903
FN904
SW901
TEMP SENSOR A
G-LCD PANEL
B-LCD PANEL
R-LCD PANEL
LAMP BALAST
POWER "K6R"
R/C "K29D"
FN906



MAIN (SIDE:B)
FN905
TEMP SENSOR C
FN907